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Original Articles.

TREATMENT OF ACUTE RHEUMATISM.*

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The task of discussing the treatment of acute articular rheumatism, as a climax to this exhaustive discourse, is inevitably rather thankless. Decided convictions as to the successful and satisfactory therapy, I have not. Too many times has experience contradicted and reversed previous conclusions to permit me to hold dogmatically to lines of procedure at all inflexible. Too thoroughly ground in upon me are the doubts and disappointments of clinicians, to allow me to harbor the hope of authoritative routine.

What I have to offer is a tentative and provisional interpretation of accumulated experience, which seeks to harmonize obvious conflicts in the line of advance of investigations in this field. The history of the subject is full of interest. The frequency of occurrence and ease of diagnosis have made this an inviting field for therapeutic measures. The consequences have, as usual in such circumstances, been more or less disastrous. The number of plans and agents which have traversed the scale from favor to disfavor must create the impression that treatment has been in the past unsatisfactory. That such is the fact, the therapeutic nihilism of many close observers abundantly evinces. The subject, however, is not for such reasons barren.

Without undertaking to deal with the detail of development of this subject, I wish to refer to the various points of view heretofore held, and to comment on the tendencies of treatment following such outlook.

With noticeable uniformity the more or less imperfect groupings of symptoms which have been called rheumatism have been attributed to altered conditions of the blood. The conception of constitutional character is quite likely most natural; in view of the clinic behavior of the disease, it would indeed be difficult to long regard it as local.

Morbific influence generally located in the blood has been accepted as at least a fixed factor in etiology. The genesis of the morbid material will afford endless discussion.

Only so far as it underlies therapeutics need I enter that territory. The earlier history of treatment shows at various times divers theories as to the nature of the poison. Removal, neutralization, or antagonism of the morbific substance distinguished the serial steps in the evolution of treatment.

Almost uniformly before about 1860, the measures of treatment were depurative: bleeding, catharsis, diaphoresis, emesis, blistering. Each of these measures has abundant testimony to show its value at some point. The grand result, however, as viewed from this distance must be regarded as at least questionable. On the whole, I believe patients were better untreated.

The next advance in practice is marked by the utterance of the lactic-acid theory, whose corollary was the alkaline plan of neutralization. Upon this territory therapeutics rested for a considerable period, and with distinct advantage and permanent improvement in method. It must be said, however, that the acid theory has not been substantiated, and that the general improvement in results must have another explanation than that implied at its adoption.

Then ensued the period influenced by Trousseau, as usual, most observant and sound. His dicta are to-day cardinal: "No case should be treated upon a predetermined routine." "Avoid congestions of the encephalon." "Beware the anemia which follows overuse of alkalies."

Then followed the period in which Flint was the conspicuous light. Close judicial observations of the natural history of the process without treatment, conducted by him, served to abruptly correct the theories of specifics. His conclusions are fundamental as a basis of comparison of various medicinal plans.

Soon followed the introduction of the salicyl element in various forms. In this was great promise, and its early history was such as to encourage the hope for a specific. That this hope has not been fulfilled does not belittle its value nor gainsay the fact that it, of all the drugs at our command, is the most efficient.

That the obviously imperfect compass of these theories may still within its limits have been sound, we can not dispute. The scope of such views is too limited to harmonize with advancing knowledge, and the deeper levels of causation must be explored. The more intricate reactions of physiology and biology will of necessity be invoked to clear up this obscurity. We are not materially nearer to a determining cause than our predecessors, but the lines upon which our progress will occur are better determined and the points in controversy more defined.

Have we to deal with a local or general condition? Mere multiplicity of lesions does not settle that point, nor do the whimsical shifts of site. The preceding essays, however, have clearly set forth the reasons for regarding it as constitutional. Next, is it septic or toxic? If toxic, is it from invaders, or is it autotoxic? In this field controversy must occur, and the issue can not fail to be momentous, especially as bearing on treatment. We must sharply discriminate between true sepsis, the manifestation of pathogenic germs in the tissues, and intoxication as an absorption from septic development in the intestinal tract, or other external site. And again, we must sharply discriminate between toxins from such infective sources, and toxins of metabolic origin.

The territory which must be examined to clear this

*Read before the Chicago Society of Internal Medicine, April 27, 1899; vide Journal, February 11, p. 304.

obscurity is broad. We have little demonstrated knowledge upon which to found a pathology. Analogy and inferential conclusions are, on the whole, strong, and our views of the process are not seriously discordant with the past.

A comprehensive view of this subject involves various postulates. To begin with, rheumatism is not of necessity arthritis. A glance at the clinic manifestations of childhood makes that evident. Endocarditis, chorea and arthritis are the trilogy of the rheumatic picture in youth, and in that relative order of frequency. It is not competent for me to here contend for this, as it seems to me, clear association of clinic conditions.

Could anything more strikingly illustrate the complexity of the problem of treatment? What have these in common, and where is the point of divergence which determines their various aspects?

Is it not a mistake to regard them as sequential? Is either especially the lesion of rheumatism? Are they not all clear expressions of the rheumatic state, infection or intoxication, the determining factor of whose morphology has not been made apparent?

It is difficult to separate and clearly define the various rheumatisms. Whereas the typic examples are well enough defined, the shadings and graduations, especially in the joint manifestations of the adult, are by no means simple of distinction. It seems to me it must be recognized that a certain kinship exists between the arthritis of acute rheumatism, and the various forms of chronic and recurrent joint and muscle morbidity, whose classification will range from subacute muscular rheumatism to typic gout. What this kinship is may well receive our attention.

How the characteristics common to the class become modified to present acute articular rheumatism, is the question for whose solution is awaiting the true therapy of rheumatism.

One need not cite too extensively the common features. Let us but consider the uniformity with which the group is associated, on the one hand with gastrointestinal vice, and on the other with hepatic default. That there is a more or less definite association of type with each of these visceral conditions, I believe, but that is here beside the question. Is it sound to recognize the association, and may we consider the sequential, if not the causal, relation established?

My belief in this would constitute my second postulate. I recognize the relation as one of intoxication, either derived from the intestine, by absorption of noxious products there developed, which process should be called autotoxic, or an intoxication engendered in the process of defective transformations of food after absorption, especially in consequence of hepatic failure, which I would distinguish as metabolic. Upon this broad territory we find arranged the changeable pictures of joint, muscle and nerve maladies, and from this foundation we may erect specific structures of disease, which result from the introduction of one or many new etiologic factors.

It is forced upon us that the behavior of acute rheumatism is like that of the other infections. All new light seems to emphasize that view. Nevertheless, the underlying conditions of autogenetic intoxication must be recognized as of fully co-ordinate influence. I dwell upon this, because I consider that it is the side of the problem to which the therapeutics can bring some measure of correction. To be sure, the same relation may be assumed in some degree as to other infections, but by no means with the same directness. The clinic relationships in the rheumatic group are striking. Take for example tonsillitis, for the moment not questioning as to its exact type. Assume, if you like, as is argued, that it is the gateway of infection that may determine rheumatism. Is it not always associated with a pronounced biliousness, and is not biliousness a pre-existing intoxication? Though difficult to demonstrate, I am disposed to think that the line between tonsillitis and an attack of rheumatism may be determined by the relief of the biliousness, hence my emphasis of the underlying toxic state.

In the early stage of acute arthritis, the prime consideration is the relief of pain. The graphic description given in the earlier part of this discussion (see JOURNAL, pp. 304 et seq.) can but demonstrate the destructive effect of this process upon the nerve centers. The logic point of therapeutics, however, is elimination. I have no doubt as to the influence upon duration and complications of depurative measures. Fortunately the efficiency of our most valuable drug is in both of these directions.

The salicyl element, particularly in the salicylate of soda, is, in rheumatism, par excellence, an analgesic. In many conditions besides rheumatism it is a pronounced eliminant. Is not its superiority over other analgesics due to this fact? I can not accept the theory that it acts in rheumatism as an antiseptic. I am inclined to think that its especial value, over, for example, the coal-tar group, lies in its influence upon destructive metabolism, the promotion of which must underlie elimination. Thus is grounded my belief in salicylate of soda in the early stages of rheumatism, given in profusion while necessary to relieve pain; more moderately when the effect is directed toward elimination; but given to its effect, almost without regard to dosage, though for brief periods. Its heroic pressure for long periods has properly fallen into disfavor.

What can be considered a limit as to amount is hard to say. One to three drams, however, in twenty-four hours, is perhaps a fair statement. This limit is determined by the relief of pain. Other analgesics will occasionally answer. I have seen the pain of acute rheumatism cut short by a single dose of antipyrin. As a rule, the coal-tars are a disappointment, and not safe in large quantities. Exceptionally, both the salicylates and coal-tar products are not well borne, especially by reason of cerebral manifestations, which are disquieting. Under such circumstances pain must be relieved and if necessary by opium in some form. Pain, however, may be much palliated at times by local attention; warmth, counter-irritation, immobilization are, singly or combined, indicated.

Whether to irritate by blister, liniment or cautery, will depend upon the type of the case in hand, though generally speaking, the cautery is most efficient. It is, on the whole, not often that such measures are necessary. Warmth to the parts involved, and reasonable attention to the general warmth of the patient, must be regarded as indispensable. So far as I am informed, the new process of extreme dry heat is not of value in acute febrile conditions.

As a rule immobilization of a joint, even in the acute stage, will afford appreciable relief. Plaster of Paris is our best agent, because of its permanence and cleanliness, though not at all times practicable.

Being not a familiar resort, its use in such circumstances is rather slow of adoption, but its value is undoubted.

Much of the acute rheumatism has not severe pain, and in most cases it is relieved within a few days. The conditions then become asthenic and pursue a tedious course, wherein the bodily depression is gradually augmented by an anemia of toxic origin, while the local manifestations are likely to be complicated by more or less trophic change. From this point the treatment is full of perplexity. The insidious effects of the specific toxemia become indistinguishable from the autotoxemia, which I regard as more or less constant.

The low fever, the grumbling joints, the deteriorated blood, form a familiar picture to which are added various irregular manifestations of toxemia, as urticaria, erythema, renal complications, etc., and not infrequently at this stage an outbreak of the disease afresh, in the heart. What to do as these phases pass along, to prevent or mitigate the dangers which we know to exist, is always a problem. Intestinal foulness is a constant feature of this stage; hepatic torpor is an important factor in determining this foulness. Elimination is the watchword, by skin, kidneys, intestines, and by liver. Not only must no avoidable accumulation be permitted, but the activity of the emunctories must be invited.

It is during this period of intoxication without pain that the alkaline treatment becomes most useful. Why, I can not say. Unquestionably it promotes *final* excretion. To what extent does it promote the processes which necessarily precede excretion? The value of alkalies in many toxemias, even those strictly of metabolic origin, is well known. That this value lies in the neutralization of acid, is open to doubt; that its influence is in promoting elimination, can not be made clear. But there is no doubt of its value, given boldly in many conditions of the later stages of the disease. It is possible to abuse the method. Trousseau pointed out the objectionable anemia which too much alkali induces. The use of alkalies should not be uninterrupted, nor should the current blood state be ignored. Along this line also, the phosphate of sodium is of use. Given in dram doses in plenty of hot water, its customary influence upon the liver, and the general improvement in intestinal conditions, are most effective in certain cases.

Mercurials, which were the standby of our forefathers, are on the whole not satisfactory. If given, however, my experience would lead me to prefer occasional pronounced effects, rather than the sustained effect which I seek in other conditions.

Of all questions involved in the therapeutics of rheumatism, the greatest is: Can we influence by treatment the tendency to the development of grave complications, particularly in the endocardium? My personal observation does not lead me to a conclusion on this point. My hospital experience does, however, lead me to great distrust of the conclusions deduced from the hospital records, commonly cited in this argument. I need hardly emphasize the great inaccuracy of such data in general. Hence the statistic presentation of the case, which is not only discordant, but presents upon each side variations of a small percentage, I am not at all disposed to be guided by. Able men declare that the heart development is less likely under the salicylates. As able men declare the alkalies have the same protective power.

Logically, if the rheumatic poison, no matter what its source, is at all antagonized by either of these plans, the endocarditis and pericarditis, which are not complications, but co-ordinate developments of the disease, will be influenced by either in proportion to its efficacy. Personally, I believe: 1. That the selection of remedies should not be by routine, but according to the type presented. 2. That the cases will be appropriate for one or the other treatment. 3. That the cases with pain are best started upon the salicyl treatment. 4. That most cases are better, after the subsidence of pain, upon an alkaline treatment. 5. That the usual plan, recognizing the value of both salicin and alkali, of combining them in treatment has the disadvantage of exhausting one's resources, as neither should be continued indefinitely.

When the heart complications do occur, the plan of procedure is not usually materially modified. The indication is for quiet. Bodily quiet, cardiac sedatives, vascular relaxation, constitute our indication.

Morphia and aconite are the best and safest cardiac sedatives. Veratrin is very valuable, but very poten These, when exhibited, usually provide all the vascular relaxation necessary. However, at times more i needed. Carbonate of ammonium, iodid of potassium, nitroglycerin, are all of great service in reducing blood-pressure, and hence their favorable effect upon the circulation, too often regarded as heart stimulation.

The tendency occasionaliy manifested to congestion of the encephalon must be regarded. Long ago, Trousseau argued against quinin on this ground. Later it has come to be rather accepted that the salicylates must have similar restriction. General principles apply. We all hesitate to further congest a smouldering encephalon. The nerve manifestations are our only guide. These may mislead, but we have no better.

If the symptoms be interpreted as indicative of cerebral irritation, the salicylates should give way to the alkalies.

A mild grade of nephritis is very common in the course of rheumatism. It is rare that it is significant, in its recent development, but its treatment should be, if possible, alkaline.

Frequently cutaneous eruptions come and go in the course of the disease. They need perhaps no treatment, but the effect of treatment upon them ought to be instructive as bearing upon the coexisting toxemia. For example, one sees occasionally repeated crops of hives. It is not without its significance, that the same remedy that is efficacious in general is also so here.

Pilocarpin is almost a specific for this condition. May it not be that this stimulation of pancreas has a more than casual importance in this question? I am disposed to think it is another item of value in the determining of the part played by intestinal vices.

Concerning dietetics I care to say little. When one has taken into consideration the peculiarities of the intestinal and hepatic conditions that may be present, and has attempted to proceed in accordance with the general proposition that infectious processes are usually overfed, he finds himself reduced to a milk and farinaceous diet, and, I believe, on the whole more safely so. That more elaborate methods become necessary in the recuperation is hardly for me to discuss.

There is no doubt that the treatment of rheumatism

is to only a limited degree curative, though abundantly palliative. The average duration has not been materially affected by any so-called plan.

This does not warrant inactivity in the premises. Skilful use of the means at hand is imperative. It is incumbent upon one to know their various relations, and then to adopt as a guiding principle Trousseau's rule: "No case should be treated by predetermined routine."

Right in the face of this sage advice, and while accepting it fully, I venture to outline a routine, which I would apply to a typic case. Inasmuch as one may never see a typic case, the stultification may not be so great.

1. Empty the bowels thoroughly, preferably with a sharp mercurial.

2. Administer salicylate of soda to its full analgesic effect; if it is not well borne by the stomach, its equivalent, oil of wintergreen. If it is contraindicated by cerebral conditions, use antipyrin, or the coal-tar preparation best adapted. If these are contraindicated, by condition of the heart or nervous system, use opium. At all events control pain.

3. As the pain is controlled by such means, aided by local measures, particularly heat and immobilization, gradually draw away the salicylate element and saturate the system with alkali, continued until the active process seems controlled.

4. Finally, while giving alkali, or after it, administer iron, providing the conditions of bowels and liver permit.

5. At all times, and incessantly, strive to promote intestinal hygiene, by mercurial, cholagogue, or saline, with the conviction that upon the processes here represented, the disease, its duration, and complications largely depend.

Impatience with the tediousness of the course, leading to ill-considered and premature activity, must be avoided.

The most discouraging behavior will swing around into satisfactory convalescence, often in the briefest period. One may well question whether his efforts have, to any considerable degree, influenced the course. When one considers the relief of suffering in the acute stages; the specific measures of treatment appropriate to the heart conditions; and finally, if he shares the view that the general toxemia is an important element, and more or less amenable to corrective measures, he will, I think, be satisfied that there is abundant scope for his most discriminating judgment.

Lavage of Esophagus.—Dr. I. Boas gives (*Die Therapie der Gegenwart*, March, 1899) the following indications for washing out the esophagus: 1, to remove foreign bodies or particles of food; 2, in all forms of diverticulæ; 3, to remove the accumulated mucus in stenosis of the esophagus, and 4, to remove the broken-down tissues of ulcerating tumors. When the esophagus is impermeable, the washing can be performed by the regular stomach-tube. When the esophagus is permeable, it becomes necessary to shut off the cardiac end of the esophagus before lavage can be accomplished. Dr. Boas has devised such an instrument. It consists of a stomach tube with an end and side opening at both extremities. To the proximal side opening is attached a tube with a funnel. A tube of a smaller caliber runs inside the whole length of the large tube, ending a little distance beyond the distal and proximal extremities of the outer tube. To the proximal end of the inside tube is attached a bulb, and to the distal end a rubber bag. After the tubes have been introduced into the esophagus, the rubber bag is inflated with air by pressing the bulb, and thus, shutting off the cardiac end of the esophagus, lavage can be performed.

DISFIGUREMENTS OF NOSE AND MOUTH.*

AND THEIR SURGICAL TREATMENT.

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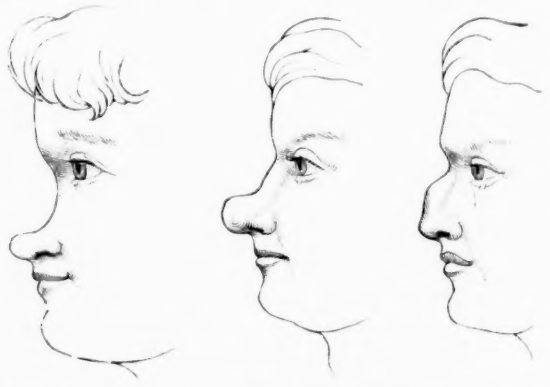
Much more can be done for the relief of nasal and oral disfigurements than is realized by those who have not given attention to this branch of surgery. The public also is to a large extent unaware of the resources of modern surgery in these disfigurements.

Treatment is very desirable, because the deformity is often conspicuous and a source of great annoyance to the patient and his friends. In many cases this esthetic reason for treatment is, however, subordinate to the necessity of correction in order that proper respiration, proper speech and perfect mastication



may be attained. In some conditions, as in complicated harelip, there may be great difficulty in nourishing the child because of the interference with suckling. Mouth-breathing, nasal intonation and imperfect mastication may give rise to mental and physical characteristics, which are often undesirable and which can in many cases be prevented or improved by an early recourse to surgical correction of the malforma-

tion. It is only necessary to refer to the dull and heavy facial expression of a child whose obstructed nose causes a perpetually open mouth, and to mention the shyness which often belongs to adolescents who have some facial disfigurement which they think makes them unduly conspicuous.

*Read at the Meeting of the Florida State Medical Association, April 19, 1899

Many of the worst deformities of the nose and mouth are due to congenital defects, but injuries, syphilis, burns, the unskilful use of caustics, and gangrene following infectious diseases, are not unusual causes of the conditions under consideration.

There are many forms of disfigurement in the nose which can be subjected to surgical treatment with great satisfaction. There is the nose with the sunken bridge, due to want of full development of the bones and cartilages. This is sometimes called the saddle-back nose. A more marked deformity, of a somewhat similar kind, but made worse by the greater caving-in of the bridge of the nose and the turning up of the tip, is found after syphilitic destruction of the cartilaginous and bony interior. Bent and twisted noses

are often the result of fracture received in the early periods of life. The lobe of the nose may become tuberous or bulbous from development of a new growth in its tissues, or from hypertrophy due to acne rosacea. The angular nose is produced by an abnormal development of bone or cartilage at or near the junction of the inferior border of the nasal bones and the cartilaginous nose. The Oriental type of nose seen in the Hebrew race sometimes amounts almost to a deformity. All these conditions can be modified by surgical procedures. The application of caustics for the obstruction of supposed malignant growths near the nostrils is often followed by destruction of the ala and cicatricial distortion of the upper lip. Much can be done to relieve this grave disfigurement by utilizing the skin of the cheek or a portion of one of the fingers.

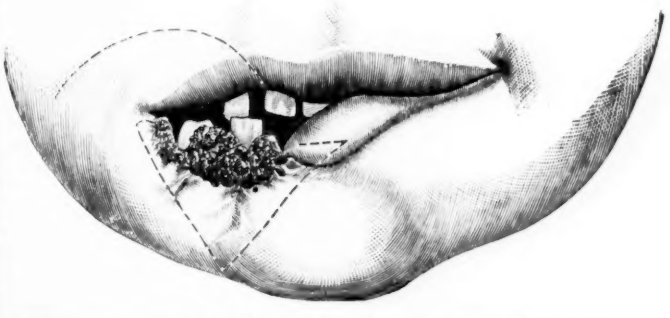
The uncomely disfigurement called epicanthus, in which there is a fold of skin extending over the inner portion of the commissures of the eyelids is not a very uncommon deformity. It requires operative treatment by the removal of a portion of the skin over the bridge of the nose.

Burns of the face and nose due to falling against a hot stove or into the fire cause sloughing and distressing disfigurement of the nose and lips. Much can be done by employing flaps from the forehead, cheeks or arm, to replace the destroyed portions.

The most common oral deformity is harelip. This condition has so many varieties, and may be combined with so many complications, such as cleft palate, protrusion of the intermaxillary bone, and flattening of the nostril, that many pages might be written on its successful surgical treatment. A somewhat similar fissure or notch is occasionally seen in the lower lip. Very rarely the fissure of a harelip extends upward through the cheek to the orbit.

The pathology of these conditions is readily understood when it is remembered that the lower part of the face is formed in the embryo by the coalescence of the branchial arches. A similar failure of coalescence of these arches may cause a lateral fissure extending from the corner of the mouth outward toward the angle of the jaw.

All of these deformities of the lip should be remedied by plastic operations during the early months of the child's life. The devices which are necessary to close these fissures and, in the case of bad fissures of the upper lip, insure proper length of the lip on the deformed side are very numerous.



The mucous membrane within the mouth, at the base of the lip, will sometimes be so great as to cause what is called double lip. Excision of this superfluous tissue will make a very great change in the appearance of the mouth. The protruding or pouting lips, similar to those seen normally in the negro race, may often be greatly improved by an operative attack.

The destruction of a great or small portion of the lip by sloughing, from burns or the use of caustics, makes all varieties of deformity. The mouth may be

almost occluded by such cicatricial contraction; and, as a result in the young the development of the jaw may be deficient because the patient is not able to masticate. In a similar manner failure in proper development of the jaw and mouth may occur from ankylosis at the temporo-maxillary joint in young children.

One of the most disfiguring conditions of the mouth is that produced by burn of the lower lip and chin, which may, by contraction of the scar tissue, cause turning down of the lip. This eversion of the lip is often so great that the saliva dribbles from the mouth, the teeth of the under jaw are continually uncovered and the mucous membrane of the lip becomes greatly thickened. If the burn has extended down the front of the neck, the chin is often pulled down upon the chest so that the head is continually bent forward.

Very distressing deformities were formerly produced by sloughing of the tissues of the cheek and lip from the toxic effect of large amounts of mercurials. These cases of sloughing from ptyalism are very rare at the present time. It was not unusual to see great loss of tissue at the side of the mouth, causing a large irregular opening in the cheek.

The methods of relieving the disfigurements of the nose and mouth, which have been thus hastily mentioned, are those which pertain to plastic surgery in

all parts of the body. Some special means are occasionally used because of the particular indications to be met. In simple cases, such as uncomplicated harelip of moderate degree, the edges of the cleft are merely freshened and the raw surfaces brought together by sutures. At the present time this is done without the use of pins. Ordinary silk sutures are more satisfactory and make less scarring. In many conditions flaps are cut and moved by a sliding process into the gap which must be filled up. The normal elasticity of the skin permits a flap so cut to be stretched into a shape very different from that which it had when dissected from the underlying tissues. The skin must not be put so much upon the stretch as to make pressure upon the small blood-vessels in the base and thereby lessen their caliber so that the circulation of the flap is diminished. The surgeon will often find it necessary to take out stitches which have been inserted because he notices the pallor produced in the flap by the tension exerted by the suture. Instead of sliding a V-shaped, elliptic, or irregular flap, rotation of a flap retaining its attachment to the rest of the skin by a narrow pedicle may be more efficacious. This method of repairing gaps in the tissues is necessitated when the uninjured skin must be obtained from a point at a considerable distance from the gap to be filled.

The apposition method and that by sliding a flap are possible when the skin to be moved is near the gap to be filled, as in sliding the skin of the cheek forward to close a notch in the lips, or in lifting up an everted lower lip by making a V-shaped incision in the good tissue below. The rotation method is necessary, for example, when a portion of lower lip is to be made out of the upper lip or when the middle of the upper lip is to be turned up to make a columella for the nose. A flap may be turned upside down, as when a flap is taken from the skin, periosteum and bone of the forehead and turned downward to be pushed under the skin of the dorsum of the nose in order to build up a nasal bridge. In a somewhat similar manner a defect in the cheek at the corner of the mouth may be repaired by a flap taken from the skin of the side of the neck, which is then turned upward and thrust through a buttonhole made along the jaw, so that the cutaneous surface of the flap from the neck presents inward toward the mouth to take the place of mucous membrane.

Skin-grafting by means of small particles of skin or long shavings made with the razor is very valuable in covering raw surfaces left by the sliding, rotation or inverting of flaps. The work of the mechanic artist is sometimes required to make artificial substitutes of celluloid, rubber, or aluminum. These are then employed to take the place of missing portions of the nose or mouth, or are inserted under the skin so as to lift up the integument and give the surface the normal contour. Such substitutes are constructed after plaster-of-Paris models have been made of the deformity.

It is rather difficult to describe in a short paper the various means of correcting particular disfigurements. A few characteristic operations may perhaps, however, be mentioned as examples of the general character of this surgical work. The saddle-back nose may be improved by making an incision through the skin and slipping a planoconvex portion of celluloid under the skin so as to fill up the hollow and make the line of the dorsum of the nose straight or nearly so. The foreign body being aseptic, causes no irritation, and the incision being properly sutured gives practically an unnoticeable scar.

Another way of doing the same thing, valuable in some cases, is to separate a portion of the nasal process from the upper maxillary bone by means of a chisel introduced through the nostril. If this is done on both sides of the nose the pieces of bone may be pressed upward and forward so as to elevate the bridge of the nose; and may be held in this position until union occurs, by pins thrust transversely under them. Increased height to the nasal bridge may be given by turning down a cutaneous flap from the forehead, or by displacing toward the middle line flaps taken from the cheeks on each side of the nose.

Another method of accomplishing the object is to turn down from the forehead a flap, consisting of integument, periosteum and a small layer of bone, and to thrust this osteoplastic flap through a buttonhole of skin at the root of the nose. It remains permanently underneath the skin, covering the depression which was to be filled. The ala of the nose may be constructed from the tissues of the cheek, by cutting

a flap obliquely downward and outward from a point near the infraorbital foramen. A tip of the nose may be made by two such flaps. A portion of a finger may be utilized to replace absent nasal tissue, but the color of the skin is not apt to be quite the same as that of the rest of the nose. It is therefore usually better to use the tissue of the face when it is possible to do so.

The nasal columella may be constructed with ease from the tissues in the middle of the upper lip. The diminution in size of the lip produced by the maneuver is not objectionable, because in such cases the nose is apt to be smaller than usual and the diminution of the size of the lip gives the less prominent nose relatively greater projection. The general deformity is therefore made less conspicuous by taking from one part and adding to the other.

An angular nose is easily remedied by an incision on the bridge and chiseling away the redundant bone or cartilage. I think it is better to make the incision a little to one side than in the median line of the nose.

Twisted and crooked noses can be corrected by remedying the deflected septum by intranasal operation, separating the soft tissues of the nose very freely from their bony support, bending or twisting the nose into a better shape, and retaining it in this situation by pins or plugs.

A turned-out or everted lip is drawn into position by sliding upward a V-shaped flap from the skin of the chin, aided perhaps by the removal of an elliptic piece from the mucous membrane of the lip.

A hypertrophied lip is made narrower by cutting out a V-shaped portion of its entire thickness. Its thickness also may require diminution by excising a wedge-shaped portion extending from the right to the left side of the lip. The section removed is somewhat similar in shape to one of the lobes of an orange.

A notch in a lip is repaired by moving upward or downward the entire thickness of the lip, which is released by incisions made parallel to the vermilion border and some distance from it. It is usually possible to construct a considerable portion of one lip from the other lip, if it be intact.

When considerable portions of the cheek have sloughed away, making the mouth very irregular at one or other commissure, flaps from the cheek may be needed. If there is a large opening in the cheek at the side of the mouth, it is possible to turn up a flap from the skin of the neck so as to cover the opening. Many other illustrations of this kind of oral surgery might be mentioned, but those given are perhaps sufficient.

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Treatment of Prolapsus Uteri.—J. Gmeiner draws the following conclusions from a study of all the cases treated at the Prague gynecologic clinic in the five years before 1897; most of them followed to date. 1. Non-complicated retrodeviations: in case of virgins, abdominal intervention on the round ligaments; in case of married women, vaginal or abdominal fixation of the round ligaments. 2. Retrodeviations complicated with adherences: the abdominal route is the only one to be recommended; detach adherences, re-establish the organs in the normal relations and fasten the uterus to the wall. 3. Retrodeviations complicated with prolapsus and relaxed conditions in the perineum: intervention via the vagina, fastening the round ligaments to the anterior wall of the vagina, concluding with colpoperineorrhaphy.—*Ztft. f. Heilk.*, xix, 2.

CONGENITAL ATROPHY OF CEREBELLUM.

A RARE CASE.

BY C. G. HUBBARD, M.D.

HORNELLSVILLE, N. Y.

The cerebellum is enough of an unknown country that every case that throws any light on the functions of this organ should be placed on record. While our physiologists have explored every part of the cerebrum, and with substantial unanimity have assigned to each region its work, yet their opinions as to the functions of the cerebellum are as wide apart as are the poles of the earth. Between the views of the earlier scientists, who gave the cerebellum the control over all animal motions, and those of recent date, who assign to that organ as humble a sphere of influence in the body, almost, as the appendix, there is every variety and shade of opinion. The following case, while not unique, is rare enough to be of interest:

On Aug. 14, 1898, I was called to see Mrs. M., in labor at the seventh month. She was 37 years of age and the mother of six children, five of whom were born at the seventh month of uterine life. Two of the five children are living. I found the labor well advanced, and it terminated within four hours, without instrumental aid, the child being a female, weighing five pounds and thirteen ounces, and well formed in every part, except that from the lower part of the occipital bone there hung a sac three inches long, $2\frac{3}{4}$ inches wide and one-half inch thick at the base. The sac was filled with cerebrospinal fluid and communicated with the cranial cavity through a nearly circular opening in the bone about one inch in diameter. Its upper border was on a line drawn horizontally from the lower margin of one ear to that of the other, with the head in a perpendicular position. The lower border of the opening just touched the foramen magnum, but there was no loss of substance of any part of the spine. The most dependent portion of the sac was very translucent, but it did not rupture, although some of the fluid oozed through the walls of the sac. The remainder of the head was well formed, but its bones were more movable than usual. The child was bright and active. Artificial food had to be used, as the mother had no milk, but the food did not appear to agree with it, and the child lost two pounds in weight within two months, again regaining one pound afterward, weighing five pounds when three months old. After correspondence with eminent specialists it was thought best to tap the sac and thereby lessen the pressure on the brain. This was first done when the child was one week old. Drs. J. E. Walker and C. S. Parkhill kindly aided, and the sac was aspirated and six ounces of fluid withdrawn. After the sac was emptied there was found to be quite an absence of brain substance. Fully one square inch of bone was lacking. The finger could be swept around under the bone within the cranial cavity, one-half inch beyond the margin of the opening in every direction except downward. All thoughts of removal of the sac were abandoned when the size of the opening was discovered. An antiseptic pad was applied and pressure attempted, to prevent refilling of the sac, but within two days the sac was as full as before tapping. The fluid withdrawn was highly tinged with yellow and loaded with albumin. Eight days after the first tapping, the operation was repeated and the same amount of fluid drawn off, and thereafter once a week for three weeks the sac was tapped, with similar re-

sults. After the third tapping the child lay in a semi-comatose state for two days, refusing all food, but finally rallied and became as bright as before. The fluid became gradually lighter in color after each tapping, until it looked like water, when the child was a month old. The sac became more circular in shape instead of being flattened from above downward as at first. Its walls grew thicker until all danger of rupture subsided. It was thought that the loss of so much albumin must interfere with the nourishment of the child, and as there were no symptoms of brain pressure a longer time was allowed to elapse between the tappings. After the fifth tapping the sac was undisturbed for two weeks when, on the withdrawal of the fluid again, a marked increase in the atrophy of the cerebellum was noticed. A probe was passed an inch beyond the margin of the opening up underneath the bone. All measurements of the depth of the cavity in the brain were made outside the sac, which was pushed back into the cavity, and nothing was passed into the sac but the fine aspirating-needle under antiseptic precautions. Between the sixth and seventh tappings three weeks intervened. This last operation so irritated the child that the withdrawal of the fluid was thereafter abandoned.

The head was well shaped and comely until the tappings of the sac ceased, when the head began to enlarge and present the appearance of hydrocephalus, which became very marked until December 28, when the child died, aged four months and fourteen days.

A partial autopsy was held, but no permission could be obtained from the friends to remove any portion of the brain. Over two quarts of fluid were removed from the cranial and spinal cavities. The opening into the occipital bone was centrally located directly over the foramen magnum, touching the latter at its upper margin. The cerebellum was so atrophied that its right hemisphere was scarcely half an inch in diameter, the other hemisphere a trifle larger. The cerebrum was also atrophied, but not to so great a degree. Although the meningeal membranes lined the sac throughout the whole of its extent, and consequently had been punctured seven times by the aspirating-needle, yet no evidences of meningitis could be detected by the eye.

The history of this case does not seem to indicate that the cerebellum has a dominating influence in maintaining human life. We do not say that the organ is not essential to life, but here is a child living for months with but a remnant of the cerebellum left, and yet no signs of paralysis, spasm, convulsions, loss of function, nor organic activity, in any part of the body. The head did not enlarge until the tappings were stopped. The hydrocephaloid enlargement might have taken place had the tappings continued, but the case certainly encourages surgical interference in hydrocephalus, to prevent enlargement of the head. Had there not been cerebellar disease and the consequent atrophy, and had the child been well nourished, the sac could have been amputated and the opening in the occipital bone been filled by the transplanting of bone from a lower animal, but such an operation was not justifiable with a progressive disease of the cerebellum, in an anemic child. The illustration given is not well executed, but it gives some idea of how the child looked. It is a view of the back of the head, with the child lying in the crib, and the size of the sac in relation to the head can be seen.

WOMAN.*

FROM A DOCTOR'S SENTIMENTAL STANDPOINT.

BY I. N. LOVE, M.D.

ST. LOUIS.

There is no subject to which I would rather respond than the one assigned me; indeed, a very considerable part of my life, more than twenty years, has been given up to responding in a feeble way to the needs of those represented in this assignment. I did not know until a short time ago that those for whom I speak to-night were to be present. It embarrasses me to a degree, for I am not constituted in a manner to praise and compliment gracefully in the presence of those involved. It would be impossible for me to say anything new, were I to try—certainly not along the lines of rhetoric. From the earliest ages, poets have sung of woman their sweetest songs, and orators have presented their most glowing sentences and finely-rounded periods, and I could not hope to cope in an oratoric way with those who have gone before me in the consideration of this subject, or those who have preceded me this evening in the discussion of other topics. I shall rather select to talk with you for a few minutes in an offhand, man-to-man way, on the always interesting theme of woman.

Ladies, I think the gentlemen are to be congratulated for their wisdom in having arranged for you to remain with them, which reminds me, by the way, of a friend who, detained in a similar way, prior to going home to the partner of his joys and sorrows, concluded to telephone and soften the asperities of the wifely greeting. A heavy rainstorm had arisen in the meantime, and the telephonic communication having been established, a companion asked him if he had been able to get his wife; simultaneously there came a fearful clap of thunder, the lightning struck the wire, the transmitter and our friend were knocked "blooming silly," and the latter cried out, "Yes, I've got her, that's she."

Woman is truly always interesting, herself, and able to make things interesting for us, but those who have given the subject any study will admit that when it comes to considering her from the standpoint of her disposition, her impulses, we know but little

* A Response to the Toast to "Woman" at the Annual Banquet of the National Wholesale Druggists' Association, at the Southern Hotel, St. Louis, Nov. 1, 1898.

of her, for to understand is to equal; indeed, the majority of us are like the man whose little boy said to him, "Papa, did you know mamma long before you married her?" and who replied, "No, my dear boy, I did not; and we have been married a long time and I don't know her yet." But, however little we know of her possibilities, we do know that all of the best interests of humanity, all that pertains to the well-being, to the perpetuity and continuity of the race, is centered in woman. Medical men and physiologists know that with the continuing of the species, man has but little to do. He may furnish the fructifying force, but woman furnishes the material elements that go to build up the successors in the evolution of our race. In other words, the vital spark that woman receives is microscopic and infinitesimal; she it is that furnishes the life-blood that permits growth, development and the perfect new being. The product that hath been blood of her blood, flesh of her flesh, and bone of her bone is as much a part of her as either half of her body would be. When we realize this physical fact, we realize that woman makes up 90 per cent. of the whole scheme of life, and surely it is our duty to guard and protect her to the fullest, and to help her to work out to the best advantage her own salvation, for it is our salvation too. Should we discuss woman, in her entire career, from the cradle to the grave, we would find her always the same, never wavering in her loyalty to those she loves.

Woman herself is the chief detractor of her sex, and John Oliver Hobbs—a woman by the way—has said, that every dinner, every lunch, every call where women meet is a field of Waterloo, and indeed that Waterloo begins for woman from the moment she disappoints her mother by not being a boy, and it ends—only when her dearest friend drops a wreath on her coffin. I am inclined to think the severest female critic of woman is the woman who is neglected or not appreciated. A Russian author with an unpronouncable, sneezing name said of a woman of this type that she was severe on her sex because she had never been asked for anything save a pinch of snuff.

Woman as wife is worthy of our most thoughtful study. In this connection I feel that a man is not a completed man until he gets a wife. I have bachelor friends who are good fellows, but a man has to be full to an unusual degree of red blood-corpuscles, and have a liberal development of mammary glands, full of the milk of human kindness, who does not grow more and more selfish as the years pass, if he lives as a bachelor. In southern Sweden it is the law of the railroads that the bachelor shall pay one and one-half fare in traveling; indeed, I think the bachelor should be made to pay double fare wherever he goes, and the married man should be permitted to travel on half fare, for it takes man and wife to make one. In fact, a man who is not married is only half a man, unless he can give evidence of devotion to a mother or a sister; if so, then he is entitled to all honor. But woman in her completeness, in her crystallized perfection, presents herself as mother. Of all the words of tongue or pen, there is no word so sweet known among men as the simple word "mother." No matter how that honor may have been conferred, whether in the regular way, whether according to or against the laws of God or man, the position is sacred. Poets and the literary geniuses of the world have exhausted themselves in paying tribute to woman as mother, and who does not feel that the whole vocabulary contains no word so inspiring, so comforting, so sweet as "mother"? We can not properly discuss this subject without touching upon the interests, the rights of woman, and I claim that any man worthy the name of man should be willing to grant to woman every right that she may ask, especially the right to equip herself to engage in any calling agreeable to her. But the higher class of men and women should get together more frequently and discuss seriously the best interests of woman. It is to the advantage of all concerned to help in the higher education, the complete education, of woman, commencing at the beginning and going all down the line. The best interests of woman call for that development of our school system, public and private, which will engraft manual training departments, whereby every girl, no matter what her station, will be taught in all the elements of domestic economy. In the public and in the private schools there should be a department devoted to the equipment of girls along the lines of home-making. In many parts of our country this work has been undertaken under the direction of the brainy women of the respective communities. I have an abiding faith that our high-grade women will develop this feature of school life to the fullest. While every department of work in the business and professional world should be open to woman, if she desires to enter and become a money-earner, I yet feel that the best good of humanity, and woman in particular, will be subserved if she confines herself to those departments of work which are closely related to the home. It is to be hoped that through the medium of manual training in our schools, public and private, housework, homework will be rendered so respectable that all classes of girls and young women will be disposed to engage in it rather than to enter the factory, the shop or the counting-room. While the entire business world should be opened to woman, still that kind of work which will give experience that more generously equips in the direction of home-making and child-rearing is to be preferred. Woman's normal place is that of bread-maker rather than bread-winner. There can be no question that the best work for women along these lines is that of teaching, nursing, and the practice of medicine and midwifery. The woman that is properly educated and especially trained to become a teacher, to become a trained nurse, or to become a physician is in good form for serving humanity, for advancing the best interests of the race, and in addition, the work in which she is engaged the better equips her and prepares her as a home-maker, as a mother of the rising generation. I have often thought that dentistry and pharmacy were especially well adapted to the deft and graceful hand and the painstaking mind of woman.

There is no tribute of praise too strong to give to woman. Surely one who has known her as daughter, sweet, loving, devoted and true, one who has known her as wife, a true friend, never wavering, more helpful and comforting when the clouds of adversity are near; surely one who has known her as mother, ready always to wipe away the boyish tear with the word of comfort, the word that inspired endeavor, ambition, ready to receive at the close of the day the tired, weary one, and listen to his evening prayer, surely there are no words warm enough for him to express his appreciation of woman. God only knows how many of us old boys, growing bald, and perhaps gray, hunger for a hug from that dear old mother, a chance to lean a

weary, aching head upon her breast—not but that we can get comfort from our dear life partners—but the spaces we long for are filled by darling curly heads that need them more than we do.

The man that is worthy of the name of man knows that a good, pure and true woman is too good for the best man that ever walked the earth. The man who is experienced in the ways of the world knows, I venture the view, that the most unfortunate woman in the lowest realm, away down beneath the very crust of society, is better, considered from all standpoints, than the average man. The man who knows the world through and through, knows that the majority of men are poorly equipped to meet the responsibilities that are associated with domestic life. And he knows thoroughly, and to the fullest, that it is the duty of all strong, earnest, honest, good men and true, and the more intellectual ones of the world, to strengthen women along every line, to open up every possible avenue for her usefulness, and in the most generous way give her the freest chance, and the fullest praise.

There is much sentiment indulged in with regard to woman, and while music, poetry, and art are the food of life, yet marriage needs more substantial rations, and we should study to help the young of both sexes to realize this.

At an earlier hour I might have been disposed to discuss this question from a facetious standpoint, but now I am serious, for this is a really serious hour in the morning.

Time out of mind we have had woman discussed unfavorably as mother-in-law and step-mother, but as a physician, going in and out of homes for twenty years, I desire to present a plea in behalf of both the mother-in-law and the step-mother. If the men who are brought in relation to them, and the children, would appreciate to the fullest the situation of the step-mother and the mother-in-law, they would realize, as I do, that they are both better a hundredfold than is generally thought.

Woman as widow should receive our admiration and sometimes our sympathy, but she does not always do so. It has been said that the widow wears mourning from one of three motives: devotion, remorse or diversion, but sometimes as ornamentation. Speaking of the widows, reminds me of the story of a good and kindly, sympathetic, motherly old gentlewoman, who was riding down town the other day in a street-car. She saw on one of the front benches one of her sex in deep mourning, crying bitterly. Upon a kindly impulse she went to her and gave her her sympathy, asking her what was her trouble, and the widow responded: "Oh, I have been married three times in succession, and each time I have lost my husband, and he has been cremated, and now I am alone in the world." The good, motherly old soul gave her the words of comfort that she was so well prepared to give, and withdrew. Passing down the aisle toward her seat, she saw in the corner a younger, attractive woman, also crying bitterly, and she said to her: "My dear, what is your trouble?" "Oh," she replied, "I am crying to think that the lady there in front has had three *husbands to burn* and I have never had any." So it goes, woman as widow, however great her sorrow, is the subject of joke and humorous remarks.

Another type of woman that has been severely criticized is the strong-minded woman who goes out to attend to public affairs, and leaves her husband at home to rock the cradle, and look after domestic concerns. But such women should not be criticized or condemned. I claim that the woman who places her husband at home taking care of the baby knows her business, and the husband who accepts such assignment is not worthy of any higher position in life, and his only chance for moving the world lies in the fact that the hand that rocks the cradle is alleged to accomplish that heroic task.

The light and frivolous woman who blondes her hair and paints her cheeks, and who apparently cares equally for the fall of a leaf or the fall of an empire, who interests us, but whom we enjoy much as we do a headache, is better than she looks. Yes, even the coquette is a being who wishes to please, and she requires great abilities, infinite pains, and a gay and airy spirit, for she is often the "stirring element amid the heavy congeries of social atoms; the soul of the house, the salt of the banquet."

Ever and anon the woman who is extravagant and bankrupts her husband is paraded, but I insist that all women are naturally close and economic, and if they appear the reverse it is in response to the desires of their husbands, whose vanity takes the form of wanting a handsomely bedecked wife.

We have heard of the irritating, nagging wives, who harass their husbands like Xantippe worried Socrates, but I insist, as suggested by *The Philistine*, that Xantippe and those like her were wise. They knew that their husbands were lazy, lounging louts, and that they needed prodding and irritating treatment to drive them out of the house and stimulate them to proper endeavor. If Socrates had not had his Xantippe he would never have accomplished anything in the world. And probably Xantippe was loafing on her job or Socrates would not have lost his path and taken the deadly hemlock route to the happy hunting ground.

But with Elbert Hubbard I would sing the praises of the average woman, "the woman who does her work, who is willing to be unknown, who is modest and unaffected, who tries to lessen the pains of earth, and to add to its happiness—she is the true guardian angel of mankind!"

No, woman, taking her all in all, is equipped in a more generous way for meeting her obligations, arising to emergencies and changed conditions, and has a greater capacity for suffering, more courage, a hundred times over, than man ever had. Nobody knows this better than a doctor. If the average man had to meet one-half the amount of pain and danger to life that woman faces when she faces maternity, there would soon be a termination of the race.

Let us then hope that woman, and particularly the American woman, will go on from day to day and from year to year, advancing, developing along the lines of education and physical perfection, until she will be even nobler and stronger than she is to-day. But, wherever we find her, we will find her a home-builder, a home-protector. As a bread-winner she is graceful, successful, but as a representative of the home interests she is ideal. She knows now, as she never did before, that no beauty equals the beauty of health, and this is best secured by following proper rules of diet, hygiene and exercise.

I hope I will be pardoned for entering a protest here against the bicycle for woman, unless it can be used with extreme caution. The wheel is like alcohol—good in some cases if used very temperately, but the trouble is that the temptation is great to use both

in excess, particularly on the part of emotional and impulsive people. Good, old-fashioned walking is a superb exercise, but the game of golf, from every standpoint, is unsurpassed. Speaking of woman and the bicycle, I sometimes think, when I see a bifurcated bloomer on the wheel, that the fool-killer neglects his business. However, if most of us were to be elected to the office, full performance of duty might force us to commit suicide.

Drummond said truly: "The greatest thing in the world is love," and woman is to be envied for her power and ability to love. Rule out of life, love, and it is a barren waste. The greater the love, the greater the life. Surely then, woman—capricious, coy, whimsical and hard to please, possibly, when being fondled and dawdled in the lap of luxury—when the emergency comes that tries men's souls, has her highest pleasure in loving, in working, living, suffering, dying, if need be, for others. The love of money is probably the root of much evil, the want of money the root of much more, but the lack of love is the very warp and woof of most of the evil and misery woven into the lives of men.

A cultured, sweet, pure, gentle-voiced, companionable, congenial, loving, lovable woman is better to be gained than great riches. "Better than fame, serener than hope, she is more than love, she is peace. She is unforsakable, and will never forsake." The man has never lived, but simply existed, who has never indulged in the luxury of the love of one such woman. And if he possesses her as "sweetheart-wife" the days and nights of his life (no matter what else may come) are spent in straying through imperishable beauties, through dawns surrounded by candors of hope; the breath of babbling brooks caresses him; he is enveloped in the sorceries of a sempiternal spring; the winds, articulate with song, choir to the skies ululations and messages of praise; each vista holds a promise; the horizon is a prayer fulfilled; he sees grief collapsed and joy enthroned, and from bending bough and every bird and blossom, he catches the incommunicable words of love.

"More light; more light," said Victor Hugo. Humanity needs to be fed on light, and as woman is the union of sweetness and light, representing the higher life, we must needs help her in her highest possibilities. Woman, the light of the home, the light of the world, each and every one of us can say, where'er we may roam:

> Lead kindly light
> Amid the encircling gloom;
> Lead thou me on.
> The way is dark,
> And I am far from home;
> Lead thou me on.

Yes, motherhood represents the purest, sweetest love in life, and it is the maternal instinct which places woman higher than "the idle angels who loaf around the throne."

Let us have a care then, that in the coeducation of women with men, and in welcoming them into all the busy realms of this work-a-day world, we do not train them away from their own best good. It was this maternal instinct which inspired many of our brainy, womanly women to noble endeavor along the lines of normal school, kindergarten, and other educational work, which means more for the betterment, the upbuilding of American homes than all the "suffrage shriekers" who ever mounted the rostrum, and who couldn't even let an echo have the last word. An old-fashioned friend near me says, "What about woman suffrage?" Why, woman suffrage is all right if woman wants it; and if she wants it, she'll get it, for she always gets what she wants; and if she becomes a voter, you may be sure that she will vote gracefully and well. Whether a voter or not, she will always be, as daughter, sweetheart, wife, mother, our best friend, and go on advancing in knowledge and power, and ever be the queen of the home, and stand for the good, the true and the beautiful, enunciating the sentiment:

> Let man rule the world,
> 'Tis nature's plan,
> While woman, by her sweetness,
> Governs man.

Yes, let woman go on, aspiring to be a home-maker, home-keeper and bread-maker, rather than law-maker or bread-winner, in the future as she has in the past, writing over the portals of the home wherein she presides, "Let all who come within leave care behind. When ye enter here, ye enter peace." Let her have carved over the fireplace in the living-room of her home the legend, as suggested by James Lane Allen in his beautiful little brochure, "The Aftermath," "Good friend, around these hearthstones speak no evil word of any creature."

And now, in closing, let me present another thought from Elbert Hubbard: "Here's to us all; may we earn a little, spend a little less; be kind; be honest; be true; have a few friends, and these without capitulation, who take us as we are." Here then again, last and best of all, is to woman, the queen of our lives; she is responsible for our being here; she makes our staying here endurable; she is always, as comforter and helper, ready to soothe the pillow of suffering on which we lie, and as we drift out on the dark and unknown sea that rolls around all the world, we can feel that 'twas woman only, God bless her, that made life worth living.

CEREBELLAR TUMOR OR MASTURBATION?

BY RICHARD C. CABOT, M.D.

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H. R., 15 years old, a native of New Brunswick, entered the Massachusetts General Hospital, Sept. 14, 1893. His family history showed a decided tubercular taint; two brothers had died of phthisis, one of meningitis, and one in infancy from unknown cause. Two members of his mother's family and three members of his father's also died of phthisis. His parents, five brothers and two sisters are living and well. Until the present illness, he had always been well and had had no children's diseases. A year and a half ago a weakness and awkwardness with the right hand were noticed; six months later, frontal headaches began to trouble him at school, and he seemed weak and nervous. He was taken out of school, but without relief to the headaches; cold and draughts seemed to increase the pain; the headaches now came on about once a week and lasted a day. His brothers are also subject to headaches.

Eight months ago, spells of retraction of the head began to appear, with some arching of the back, but without stiffness of the muscles. The attacks lasted from one to two hours, were accompanied by headaches, and were relieved by application of warmth.

At this period the patient began to seem less bright and the headaches came oftener. Three months ago he began to have trouble in walking, would stagger as if drunk, and several times fell while walking. His staggering was mostly toward the right. This difficulty and the mental dulness have progressively increased, and his hand has begun to tremble in writing; he now can not drive a nail as he used to do. There have been no gastric symptoms until two months ago, when vomiting began, coming unexpectedly, not preceded by nausea, and without any constant relation to the taking of food. This came once or twice a week at first, but has steadily increased in frequency since. Eye symptoms began about three weeks before he entered the hospital, his eyes growing steadily weaker so that he can no longer read. Double vision has been noticed several times in the last month, lasting a few minutes each time. During the attacks of retraction of the head, above mentioned, his eyes look glassy and unnatural. His hearing is very good, but roaring in the ears has been complained of lately. During one of the attacks of vomiting and retraction of the head, about three weeks ago, he was at times "out of his head" for most of one day, and, to his parents, seemed to be unconscious for a few minutes. During such spells he always breathes quick and hard, and gets dark in the face. No true convulsion has been seen at any time, no vertigo complained of; his appetite is good; his bowels regular; he sleeps a great deal and very heavily; has been growing fast and getting fat for the past year. His disposition is becoming irritable and faultfinding.

Physical examination.—When seen at the hospital he was a well-developed and well-nourished boy, bright looking, and with rosy cheeks; his pupils large but equal, and reacting normally. The eye-muscles moved normally; the tongue came out straight, and there was no facial asymmetry; two small glands were palpable over the right clavicle; there was a cog-wheel respiration at the top of both lungs; the thorax was negative; the muscular power was good and equal on both sides, but there was marked ataxia of the right arm, and the abdominal reflexes were less marked upon the right; knee-jerks were increased; the sensation was everywhere normal, the liver dulness reached up to the fourth interspace, the lower border not felt; the abdomen wholly negative.

He stayed a week at the hospital, taking extra diet, hypophosphites, cod-liver oil. Once during his stay, it was noticed that the head was somewhat retracted. It could be bent forward, but this hurt him. He was quite conscious and bright at the time, and the symptoms passed off in a few hours. There was occasional vomiting after meals. The staggering gait was very marked, but he managed to get about the wards. His urine was occasionally passed involuntarily, and at times he had trouble in starting the stream. The diagnosis of cerebellar tumor, probably solitary tubercle, was made by Dr. Cutler. He was seen in consultation by Dr. A. T. Cabot, who advised against operation, and thought he might improve under constitutional treatment. He left the hospital Sept. 21, 1893. Nearly five years later, May 20, 1898, he walked into my office, a picture of health. He now works on an express team and has not missed a day's work in two years. His most interesting statement is best given in his own words: "There was one thing I ought to have told you folks down to the hospital, but I did'nt. I used to abuse myself a lot. After I went out of the hospital I left it off, and just as soon as I did I began to get better. Now I am all right, except I still stagger in the dark, and my eyes are not first-rate." The vomiting and head retraction had ceased soon after he left the hospital. He has grown up into a well, strong boy. His right hand is still slightly weaker than the left, and he thinks his right leg is also weaker. His gait is nearly, if not entirely, normal. He reads small print well; examined at the eye and ear infirmary, June 2, nothing wrong was found in the fundus. A letter from him, received March 24, 1899, says that he is perfectly well and hard at work.

Can all the symptoms of this case be explained by the masturbation? Can a solitary tubercle of the cerebellum have been absorbed or encapsulated? So far as I know no autopsy has yet been reported, showing the remains of a healed solitary tubercle of the brain, but that such a thing is possible is certainly suggested by the like fate of tubercular processes elsewhere in the body.

SOME REFLECTIONS UPON CELLULAR PHYSIOLOGY AND PATHOLOGY.*

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PHILADELPHIA.

Modern research and investigation have shed much light on the intimate nature of disease processes, but there is a good deal of virgin soil yet to be tilled. Life may be looked upon as a manifestation of the activity of the cell (or of an aggregation of cells), which, if expended in a proper manner, represents the condition of health. Perversion of this activity, through influences acting from either within or without, leads to disease; while permanent inhibition (destruction) results in death. Normal cellular activity (function) implies a proper relation between waste (catabolism) and repair (anabolism), the replacement of used-up and worn-out material by fresh nutritive pabulum, together with the elimination of the products of disintegration—normal metabolic or nutritional equilibrium. Failure in either of these processes, as well as defect in quality of the nutritive pabulum, gives rise to derangement of this metabolic equilibrium, resulting in the one instance in inanition, in the other in intoxication. The latter, besides being intrinsic, may also be extrinsic. In any event the derangement of nutrition is attended with alteration of function, which, however brought about, adds in turn to the nutritive disturbance. Cells differ among themselves in their activity and reactivity, in their affinities and antagonisms, in their susceptibilities and resistances, in accordance with qualities, properties and attributes either derived from parent cells (heredity) or acquired through the influence of environment or other extraneous factor.

Disease may thus be viewed as primarily the expression of a perversion of nutrition, with derangement of function, and also with alteration in structure. The nutritive perversion may arise from changes taking place within the body, or result from the operation of agencies introduced from without. Thus, nutritive disturbance and functional derangement may result, on the one hand, from failure in the elimina-

*Read before the College of Physicians of Philadelphia, May 3, 1899.

tion of waste products of metabolic activity generated in ordinary amount, or the retention of such products in consequence of their generation in excess (auto-intoxication); or, on the other hand, from the action of poisons that gain entrance into the body in various ways (heterointoxication). Disease may be caused besides by certain physical agencies of extraneous origin, such as violence, extreme heat or cold; and as a result of the invasion of micro-organisms (infection) and the unfolding of their activity (intoxication). Physical agencies give rise to disease directly by reason of their destructive effects, and indirectly by rendering favorable the conditions for infection and bacterial activity. Destruction of tissue means loss of function and deranged metabolism, and altered nutritive conditions. Bacteria act in part as foreign bodies, in part as parasites, and often in most important part as producers of toxic substances; and in each of these ways they cause modifications in cellular activity and in cellular metabolism. Derangements of nutrition may, if profound or if long maintained, give rise to structural alterations, and these in turn to organic change.

Applying the foregoing considerations to the process or complex of symptoms that we designate inflammation, we would say that any irritant, local or general, infectious, chemic, mechanic, gives rise first within the range of its activity to modification in the nutrition of cells in a larger or smaller area, and as a result of the metabolic disturbances thus generated other irritating substances are set free, that induce further changes, as manifested by local or general heat, vascular constriction and dilatation, cellular multiplication, exudation of fluid, swelling, discoloration, pain, acceleration of heart beat and of respiration, and other well-known symptoms. The results and the products of irritation by aseptic and non-toxic materials differ from those due to septic and toxic substances, and both of these in turn from those due to infectious agents, by reason of differences in chemic affinity and activity, both in quantity and in quality, and in accordance with the localization or dissemination of the infective agents (micro-organisms). The resulting inflammatory changes in local cellular metabolism and activity give rise to the local heat, the local vascular changes, the local increase in cells and exudation of fluid, the local discoloration, swelling and pain; while absorption into the general circulation of the products of the local metabolic abnormity gives rise to the pyrexia, and, alone, or perhaps in conjunction with this, to the acceleration of heart beat and of respiration, the thirst, the headache, the delirium, the convulsions, the coma and the other symptoms, in accordance with the chemic affinities and activities of the metabolic products generated and the cellular area attacked. The inflammatory process is sometimes unattended with pyrexia, and the explanation of this apparent paradox must be sought in the chemic affinities and activities of the metabolic products generated, and reciprocally the reactivity of the nervous mechanism attacked. Bacteria are foreign bodies and, finding lodgment in any tissue, give rise to independent local lesions and processes. Some of the products of cellular activity cause hyperplasia, just as certain nutritive conditions are conducive to the continued existence, activity and multiplication of micro-organisms. Other of these products cause cellular necrosis and degeneration, just as many micro-organisms are destroyed by the products of their own vital activity and so-called self-limited diseases are in part terminated.

Going a step further and applying the considerations brought forward to our present conceptions of immunity, we would assume that in the natural, hereditary or congenital variety the cells of the body have been endowed, by transmission from the parent or parents, with a certain physiologic activity, in consequence of which, through themselves directly (phagocytosis) and indirectly through the fluids by which they are surrounded (blood, lymph, serum), or substances that they generate (alexins, antilysins, antitoxins), they either repel the invasion of pathogenic bacteria, or failing in this, they counteract the effects of the noxious products to which these give rise. In acquired immunity, on the other hand, the modifications in cellular metabolic equilibrium that are responsible for bactericidal and antitoxic activity are induced through the agency of the chemic substances generated by the specific micro-organisms, either through the disease itself or through inoculation or vaccination or antitoxication. The cells are made by exercise under appropriate stimuli to evolve a latent function.

The nutritive, metabolic and cellular processes that we have been considering briefly apply equally to normal and to morbid states and with especial fittingness to the disorders that we are in the habit of designating functional or idiopathic. Sleep may thus be looked upon as resulting from the action of certain metabolic products upon the higher cellular elements of the central nervous system; narcosis from perhaps others of like kind; thought from the action of other metabolic products; sensation and volition and voluntary action from the operation of still others; and so on, *ad infinitum*. We have long passed the threshhold of a specific pathology; it is time that we recognized that we are moving in the domain of a specific physiology. In partial confirmation of this proposition it need only be pointed out that many of the states named, normal or abnormal, can be induced, at least in some degree, by various medicinal agents.

Derangement of the normal metabolism affecting especially the cellular elements of the nervous system may result in wakefulness, in delirium, in insanity, in neurasthenia, in hysteria, in chorea, in epilepsy, and other cognate disorders. Whether the neuron is motile or not is unimportant in this connection. It is probable that it is, as contractility is an essential attribute of all living things. The terminations of neurons are, moreover, not in absolute contact, but rather in approximation, and it is likely that no disturbance of function results from such changes in relation of end-brushes as is constantly taking place. That which is of real importance is the influence that is responsible for all the functions of the neuron, including its contractility, and that is its nutritive state. We would not say that darkness is responsible for the lower temperature of night merely because the two are associated, when we know that it is the withdrawal of the influence of the sun to which both phenomena are due. No more should we, therefore, make the motility of the neuron an essential factor in the physiology or the pathology of the nervous system, as that is but one manifestation of the activity of the nerve-cell. Neurons must vary in size and shape and relation and chemic affinity and activity in accordance with their nutritive and metabolic condition, and it is changes in this state that are responsible for the vari-

ations in functional activity in both health and disease. Changes have been demonstrated to take place in the ganglion cells of fatigued animals and of those subjected to various infectious and toxic processes. Such changes, if long continued or of sufficient intensity, may give rise to permanent structural alterations, such as have also been found after infections and intoxications in both lower animals and men. In this way chronic degenerations arise and death results.

A quotation from a paper[1] read some years ago seems not inappropriate at this point:

> Every cell inherits from its parent cell a certain lease of life, at the end of which physiologic death occurs. This period, however, may be influenced by external conditions. Premature death is pathologic. We can not recognize a pathologic longevity. Similar laws apply to the human individual, the composite of a vast aggregation of cells of widely differentiated function. The life of man may be divided into three periods: that of evolution, of growth, of development; that of maturity, of perfection; and that of involution, of decline. The first begins with birth, the last ends with death.
>
> During the period of growth and development, tissue-change and destruction—catabolism—are more than offset by tissue construction and repair—anabolism. Nutrition exceeds waste. Building up is more active than tearing down. With the activity of life comes the demand for the highest differentiation of function of which the organism is capable. This represents the perfect individual. For a time, a condition of equilibrium is maintained. Sooner or later, however, the tide begins to turn. The equilibrium is disturbed. Waste exceeds repair. The cellular assimilative function becomes impaired, the constitution of the nutritive fluids defective. Tissues and organs are imperfectly furnished with the materials for their maintenance. Vascular changes occur. In a vicious circle, one baneful influence reacts upon another. The entire organism is reduced to a condition of deterioration. Finally, the state of nutrition falls to so low a level as to be insufficient for the purposes of life, and functional activity comes to a standstill. This is the physiologic process, as it occurs at advanced age, and constitutes the condition of senility. Occurring at an earlier period, however, the process becomes pathologic, recognized clinically by signs and symptoms which may be conveniently included in the designation "premature senility."
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> As the component parts of the organism depend for their sustenance upon the nutritive elements of the blood, so will their functional stability be governed by the quality and quantity of the circulating medium. Thus, we would be led to look to the blood as containing the excitant which induces the earliest changes. The function of the cell once impaired, the deleterious action of the blood would be augmented by the retention of matters which it was the part of the cell to remove, and the addition of products from the degeneration of the cell.

Other aspects of the results of derangement of metabolic equilibrium have been dwelt upon recently by Riesman[2], who refers to the products generated in consequence of certain neoplastic and hyperplastic processes and the symptoms resulting therefrom. For this condition he proposes the appropriate designation "metabolic toxemia." So-called internal secretions and their derangements are to be considered in the same connection.

A most valuable contribution to this subject, from the chemic point of view, has been made by Chittenden since this paper was written, in a communication on "Autointoxication," presented to the Pathological Society of Philadelphia on April 27, 1899.

[1] A. A. Eshner: Arteriocapillary Fibrosis. Transactions of the Philadelphia County Medical Society, 1891.

[2] Internal Secretions; Metabolic Toxemia. Phil. Med. Jour., Feb. 4, 1899, p. 270.

Dr. W. W. ASHTON, Alexandria, La., has been appointed by the State board of health as resident inspector at New Orleans.

SUBCUTANEOUS RUPTURE OF LARGE ARTERIES FROM CONTUSED WOUNDS.*

BY J. A. CROOK, M.D.

JACKSON, TENN.

In the treatment of this subject I shall not discuss injuries to the arteries as they usually occur, complicated with grave lacerations of the skin and soft parts, but will limit the scope of this paper to those cases where the force of the injury is so directed against the artery as to rupture its walls, while the skin and soft parts remain practically intact.

As an introduction to the subject, I present the following case: James W., colored, age 23 years, brakeman, while coupling cars at Grand Junction, Tenn., 1 A.M., May 21, 1898, had his right arm caught between the bumpers, the soft parts contused below and above the elbow, the neck of the radius fractured, the vessels ruptured, the skin remaining intact with the exception of slight abrasions of the cuticle in a few places. He was at once attended by a physician, who stated that he would be disabled for some three or four weeks. He arrived in Jackson about 4 A.M., when Dr. J. L. Crook called to see him and dressed the swollen arm in hot antiseptic dressings.

About 10 A.M. we found him suffering greatly, the arm and hand being cold and enormously swollen. There was complete absence of the radial pulse, nor could any pulsation be detected in the ulnar artery. We diagnosed the case as rupture of the brachial artery with great injury to the subcutaneous tissues and probable fracture of the neck of the radius. On account of the enormous distension of the arm, caused by effusion of blood in the intercellular tissue, we could not make a positive diagnosis of the fracture.

To relieve the great swelling and tension I made several punctures into the tissues with a keen narrow bistoury at various points along the under side of elbow and arm and on the back of the hand, which allowed the effused blood to flow out freely until the tension and pain were relieved. The arm was then bathed in hot bichlorid water, wrapped in layers of cotton wrung out of hot bichlorid solution, dry lint applied over this, and bandaged with sufficient support to restrain hemorrhage. The patient expressed himself as being greatly relieved and said that his arm was very comfortable.

I stated to him that it was highly probable he would lose his arm, that the arteries were ruptured and the soft parts and capillaries so badly injured that it was hardly to be expected that sufficient circulation would be carried on to save its life. His reply was that he would never consent to having his arm "cut off," "that he could work his fingers and had some feeling in them."

The next day there was some improvement in the arm, there was feeble capillary circulation down to the metacarpo-phalangeal joints, but no circulation in the large vessels. I continued the same line of treatment, and the condition of the arm remained about the same, only showing a little more sign of returning life, for several days; some blisters, however, appeared near the wrist and along the forearm, but the thumb and all the fingers began to shrivel and assume the condition of dry gangrene back to near the metacarpo-phalangeal articulation. The patient was free from fever, comfortable, with a good appe-

* Read before the Tennessee Medical Society, Nashville, April 11, 1899.

tite, and quite cheerful. We had strong hopes of saving all but the fingers. It seemed that the hot bichlorid packs had exerted a salutary effect, the condition of the arm remaining almost stationary for two weeks, the few blisters mentioned being the only sign of developing mortification except at the finger tips.

But on visiting him June 15, sixteen days after the injury, we saw that our efforts to save the limb had failed, that the forces of life were withdrawing to a point including a portion of the elbow-joint, and the hand and arm were in a condition of gangrene. On the morning of June 20, twenty-one days after the injury, the line of demarcation being plain, the patient was removed to the Presbyterian Hospital and I amputated the arm above the elbow at the junction of the middle and lower thirds. The patient made a rapid and uneventful recovery.

In reviewing the literature at my disposal I was astonished to find that so little had been written on the subject of rupture of large arteries. Neither Gross nor Wyeth mention such injuries, and the "American Text-book of Surgery" devotes only a few lines to its consideration. In this age, owing to the vast multiplication of railroads and other means of rapid transit, such injuries are likely to be of frequent occurrence. Hence they must prove an interesting type of traumatism, fraught as they are with such grave consequences to the limbs and lives of the victims, and with such great responsibilities to the surgeon.

In the *Railway Surgeon*, May 31, 1898, and subsequent issues to July 26, 1898, there appeared a translation of a continued article by Felix Lejars, in which he reports a case almost identic with this case, caused by two wheels of a loaded cart passing over the right arm and producing attrition of the right brachial artery. In this case a dry gangrene developed in the thumb and fingers, almost exactly as first appeared in the case I have reported. But as the soft parts were not so badly damaged, Dr. Lejars was enabled to save the arm, with loss of thumb and fingers. The radial pulse appeared, though feeble, four months after he had amputated the fingers. Above the elbow, a vertical cord could be felt strewn with nodules that seemed to be the obliterated artery (vide cut of this case, *Railway Surgeon*, May 31, 1898, p. 8). Dr. Lejars collected thirty-four cases, only four of which involved the brachial artery, besides his own—those of Cusco, Moré, Hulke and Lawson. About one-third of these cases involved the popliteal and one-third the femoral arteries, showing such accidents to occur most frequently in the lower limbs. Such injuries are caused by severe contusions, such as being caught between the bumpers, as in my case, or from severe pressure, as the passage of a wagon-wheel, in Dr. Lejars' case. Under such circumstances, it can readily be perceived that an artery filled with blood may have its friable coats ruptured without any laceration of the skin or soft parts. These lesions may be of different degrees of gravity, as a total rupture, rupture of the middle and inner tunics, or of the inner tunic alone. It is important to remember that while in some of these lesions the subjacent circulation is obliterated from the first, others manifest themselves by a slow coagulation which may require several days to complete.

The clinical picture presented in cases of immediate obliteration will materially differ from that seen in those where obliteration is retarded. In the first instance, the symptoms are well marked. If the traumatism has been severe there will frequently be considerable shock—general and local. Absence of the pulse in the region below the site of rupture is an important sign, and was plainly manifested in my case. It is well here to emphasize the importance of search for the pulse in all severe contusions of the limbs to ascertain if the circulation is impeded. Coldness of the limb is always present and its temperature is appreciably lower than that of the sound one. There will also be a diminution of sensibility, though the zone of cutaneous anesthesia does not always correspond with the cold areas. These symptoms, associated with swelling, distension and pain incident to the pressure from effused blood, can hardly be mistaken by a careful observer.

The diagnosis is not so clear when the signs of obliteration are tardy in appearing. In a case reported by Hulke, he states that "there was no sign of arterial lesion until the third day, when the forearm and arm were swollen and strewn with red and green spots nearly to the shoulder." Verneuil corroborates this testimony in reporting a case, saying: "A man received a contusion of the groin; at first the circulation in the leg kept up and the phenomena of obliteration did not appear until twenty-four hours after."

But whether the obliteration be rapid or slow, the injury is grave and generally followed by gangrene of greater or less severity. However, it occasionally happens that healing occurs after arterial attrition, leaving no other effect than a slight weakness of the limb.

It is hardly necessary to say that we should exercise great caution in giving a prognosis in these cases. The reasons for this are obvious. If the middle and inner tunics only are involved, it may be followed by a large aneurysm, or secondary hemorrhage from sloughing of the other coat.

The treatment should be conservative, every effort being made to restore life to the limb and prevent gangrene, which is so imminent. To this end, the entire limb should be thoroughly cleansed and rendered aseptic by antiseptic solutions, attention being given to every abrasion in the cuticle lest it be the point of entrance for infection. This treatment should then be followed by enveloping the limb in hot antiseptic packs, wet and dry, over which thick layers of dry cotton are applied, supported gently by a bandage. If indicated, as in my case, I should not hesitate to make punctures into the cellular tissues to relieve the tension and allow the effused blood to escape. It may sometimes be beneficial, if the case is seen early, to open up the limb, evacuate the effused blood and ligate the ruptured vessel. After the artery is secured, if there is much shock, the saline infusion would certainly be indicated. Later on in the case the treatment will depend on the condition of the limb, and the character of the gangrene. If it be dry and localized, we should wait for nature to complete the line of separation. If moist and rapid, amputation high enough to include only sound tissue in the flaps is the only resource.

THE HEALTH officers of San Francisco have ordered a detention of the transports at that place for a period of sixteen days, owing to the development of smallpox among the passengers. The transports were bound for the Philippines.

MISMANAGEMENT OF THE EYES OF READERS.

BY NORBURNE B. JENKINS, M.D.

The exact fitting of reading lenses to the eyes of studiously inclined persons past middle age, is either one of the most simple or one of the most complicated things that the oculist is ever called upon to do. In the absence of astigmatism and of a difference in the refraction of the eyes, the fitting of reading lenses is a matter of no difficulty. When there exists 0.5D. or more of astigmatism in one or both eyes, and a difference of 0.25D. or more in the refraction of the eyes perfectly fitting lenses for reading are seldom obtained.

Commonly but little care is given to the fitting of reading lenses to the eyes of persons above 40 years of age. Ordinarily the weakest convex lenses with which the patient is able to read the smallest print at a distance of 22 cm. (8.5 inches) from the eyes, are prescribed. In many cases such lenses can not be used with comfort.

For the sake of economy the shopkeeper is frequently the first to be visited by the sufferer with "failing eyesight." Here he is usually given glasses of a number supposed to correspond with his age, or frequently the customer selects for himself such glasses as will improve the near vision, which is often at the expense of comfort. In the absence of astigmatism of 0.5D. or more, and a difference of 0.25D. or more in the refraction of the eyes, for a shilling the purchaser may obtain perfectly fitting reading glasses, provided they are sufficiently weak.

The comfort to be derived from perfectly fitting reading lenses is best understood by persons, who by using them, are enabled to read for hours without inconvenience. The evil consequences of the persistent use of imperfectly fitting reading glasses are many, and include asthenopia and amblyopia. The persons, who, by reason of improper glasses, use but one eye in reading, are more numerous than is generally supposed.

Provided there is present no disease, no astigmatism of more than 3.5D. and no hyperopia of more than 5D., the following surprising statements are probably true: Most persons, from 35 to 55 years of age, have a vision, either with or without accommodative effort, of 6/3 to 6/6 (20/10 to 20/20), when looking through perfectly fitting reading lenses at distant test type; many persons, past 55 years of age, have a vision, in the entire absence of accommodative effort, of 6/6 (20/20), when looking through perfectly-fitting reading lenses at distant test type.

It is probable that from 40 to 80 per cent. of persons have, in one or both eyes, 0.5D. or more of astigmatism; and that from 30 to 70 per cent. of persons have a difference of 0.25D. or more in the refraction of the eyes. Latent ametropia sometimes exists as late in life as the sixty-fifth year.

Few persons past 40 years of age are given lenses for the correction of astigmatism. Many with astigmatism of 0.5D. or more have their lenses changed every two or more years, and go through life without any part of the astigmatism being discovered.

From experience it may be observed that many persons, with complicated ametropia, undergo the examinations of several oculists, no two of whom prescribe the same lenses, notwithstanding the refraction of the eyes is purely mechanic, the lenses only supplying the defects in the conformation and size of the eyes, which should be found to be the same in all examinations, if properly made.

The following proposition may show the need of the cylindric lens in the correction of the astigmatic eye: A given eye of a presbyope, of say 60 years of age, is perfectly fitted for reading with a compound lens + 3S. combined with + 1C. axis 98. With this lens reading for hours is comfortable. Such an eye can read Jäger No. 1 at 22 cm. (8.5 inches) with no weaker simple lens than + 4.5D., with which reading for more than half an hour is not comfortable. The mean strength or convexity of the compound lens is 3.5D., a gain of 1D., or, according to the rule as to years and diopters, a gain of about five years in favor of the compound lens.

In conclusion, it may be well to add that an improper astigmatic correction, or an antigmatic correction on a non-astigmatic eye, is more injurious than a spheric lens on an astigmatic eye.

WHERE ARE WE AT?*

BY AP MORGAN VANCE, M.D.

LOUISVILLE, KY.

In the last several months there has been much discussion pro and con of the commission evil, i. e., the mutual arrangement between the general practitioner and the specialist for a division of fees accruing from work which has been referred from one to the other. It would seem that this discussion followed an article in the *Colorado Medical Journal*, last July, by Dr. Melville Black, a specialist of Denver, Colo., who under certain conditions advocated the payment by the specialist to the practitioner of a portion of the fees obtained by him from patients referred.

Feeling that this society is representative and should not be behindhand in anything pertaining to our work, I thought it fit to bring this matter up for discussion to-night. If any of us are guilty of these practices, the free discussion of them may do us good in causing us to see the error of our ways; if we are innocent, the result of the discussion may do good to others. I will quote Dr. Black's paper in full and give some of the ideas of other men from different sections on the subject, with some comments of my own, as we progress Dr. Black's paper is as follows:

SHOULD THE GENERAL PRACTITIONER RECEIVE A FEE FOR REFERRING CASES TO THE SPECIALIST?

It may seem to a certain few that such a subject should be left out of print. I do not consider it a delicate question, nor one that is best discussed *sub rosa*. I believe that in a certain number of cases the physician should receive a fee for referring cases to the specialist.

The general practitioner is called upon to render every kind of medical and surgical service. If he sees fit to send certain cases to a specialist he displays a magnanimity unparalleled in other fields of labor. We will admit that in many instances his training and equipment are inadequate in some of the departments now presided over by specialists. The advancement of medicine and surgery has made it difficult for any one man to keep abreast of the entire field. He frequently recognizes that his knowledge in some one department is deficient. He is honest and tells the patient so. The patient is sent to a specialist. There are many instances where the practitioner has found it advisable to administer to his patient for several days before it is possible to refer him to a specialist. Again, in his anxiety for the welfare of his patient he may make several visits in the endeavor to cause the latter to consult the specialist, or may lose valuable time in going with him to the specialist. In any event he expends a certain amount of his

*Read before the Louisville Medico-Chirurgical Society, March 10, 1899.

time for which the patient will not compensate him. The patient and his family have long looked upon him as their friend and medical adviser. They never think of paying him for aught except actual professional services. They would not consider such services professional, and he would gain their displeasure if he were to present his bill for the same. In case he has treated the patient for a few days he would better erase any and all such charges for professional services from his books, because the patient considers that he has received no benefit from this treatment; that his physician did not understand his case or he would not have sent him to someone else. Therefore, if this bill is presented, no attention is paid to it, and if payment is pressed, the next time a physician is needed someone else is called in. Now, who is to compensate this physician? There is but one answer—the specialist. If the specialist does not pay him for the time he has expended, no one else does. The specialist can easily learn from the patient the extent of the services rendered by his physician. The latter should then be compensated accordingly.

There are many times when the family physician is asked to recommend a specialist. He is not called upon for services nor does he find it necessary to see that the patient goes where directed. He is not inconvenienced, nor does he spend any of his time upon the case. Here it is not incumbent upon the specialist to pay the practitioner for his kindness.

Many an obscure practitioner gains standing and even prominence through the specialist. Specialists to whom he refers cases make it a point to speak well of him whenever the opportunity is afforded. This is the only honorable way in which the specialist can return many favors and acts of kindness shown him by the general practitioner.

We all make mistakes, even the general practitioner. What he has done for a given case may not meet with our approval. A hasty word or sign of disapproval may ruin the reputation of this physician in the eyes of the patient. Hence many cases are not referred because of some such former experience. Again, the time expended on a case has been considerable, to say nothing of the mental worry. To refer the case may mean that all this goes for nothing. The man to whom the case is referred forgets to even say thanks. A few such experiences tend to sour the general practitioner against specialists in general.

The object of this paper is to draw a closer bond of union between the general practitioner and the specialist; to call the attention of the specialist to his duty whenever it is plain.

I do not recommend that physicians be paid a stipulated percentage of all fees received from cases referred by them. I should consider this a great wrong. What I do advocate is that when a physician has expended his time and energy in getting a patient to come to us, or has prescribed for the patient without compensation, it should be our duty to pay the physician a reasonable fee. MELVILLE BLACK, M.D.

I have studied this paper very carefully. I agree with the author that this matter should be openly discussed, but can not agree with him in his conclusions. I think he is honest in the matter and believes he is right, but he is all wrong. If he will simply apply the Golden Rule to the case, it is settled at once. Let Dr. Black put himself in the patient's place and I am sure his conclusion will be different. Why the specialist is called upon to convert himself into a combined detective and collecting agency for the benefit of the practitioner who has had the patient first, and knows exactly how much service he has rendered, and is backed by the legal and moral right to collect for himself, I am unable to see. Any consideration of policy about doing this is a matter to be decided by himself. I think the Doctor is simply "whipping the Devil around the stump," in the special proposition he makes. I take it this is also the idea of Dr. Charles Lyman Greene of St. Paul, Minn., expressed in the following letter:

FEES FOR REFERRING PATIENTS TO CONSULTANTS.

150 LOWRY ARCADE, ST. PAUL, MINN., Oct. 16, 1898.

To the Editor of the New York Medical Journal:

Sir:—In your issue for October 8, you referred editorially to a paper written by a western man, who advocates the payment by the consultant of a commission to the general practitioner for referred cases. Such a proposition would not ordinarily be deemed worthy of notice, and I am very glad to see that it has in no respect received your editorial approval, though I am somewhat disappointed that it did not meet with the rebuke it so richly deserves. It has been whispered about for some time that certain men were accustomed to bid in this way for practice, but few of us have imagined that any man would be bold enough to openly advocate the introduction of such a shameful commercial method into a profession whose very foundation is the trust and confidence of its patrons.

If this writer's ideas were to be adopted, we should behold the edifying spectacle of a thoroughly degraded profession bidding, the one against the other, for reference of cases. The most unscrupulous man with the longest purse would, presumably, command the largest practice. With the advent of any such system the dignity of the profession of medicine would be forever lost. At present, the patient assumes that when his family physician refers him to a specialist he, the family physician, is acting solely for the best good of his patient, and that the man to whom he is referred is selected because he is, in the opinion of the physician, the one best qualified to advise or treat him. This is recognized and appreciated by the patient as an unselfish act, and it is one of the many which serve to bind him closely to his medical adviser. Supposing that a patient knew that his reference was made in return for a substantial fee, can it be assumed for a moment that his regard for his physician would remain the same? Most certainly not, for it is evident that he would have no confidence in the specialist who purchased him, and he would have lost all regard for his family physician, who sold him.

The only way in which this delectable arrangement can be carried on is in the sneaking, underhanded way which characterizes it at present; for, in spite of the many evidences of commercialism creeping out from time to time, in spite of the shameful spectacle furnished by one of the leading members of the profession in Germany, who now seeks to fatten upon the proceeds of a patent upon other men's ideas, in spite of the fact that commercialism of the rankest quality pervades our national association, nevertheless the great body of the profession of this country will cling to the old ideals, and its best men will continue to do a practice based upon merit and not upon purchase or advertising.

Behrings may grow rich upon the unclean proceeds of patent rights, but Tyndalls, Faradays, Pasteurs, Listers, and Sims's will always predominate, and their spirit of noble and unselfish generosity will pervade the work of our profession. In short, the great body of the medical profession to-day is clean, and so it desires to remain.

CHARLES LYMAN GREENE, M.D.

In the editorial referred to by Dr. Greene, in part, after mentioning the main points in Dr. Black's paper, Dr. Foster says.

We fear it can not be denied that the picture of unrequited and unappreciated services drawn by the writer is one that has its original in the experience of many a struggling and thoroughly deserving physician, but we question if the remedy proposed is just or would prove satisfactory to anybody concerned, except, perhaps, the untutored patient. The general practitioner's selection of the specialist does work to the latter's benefit, but if it is made conscientiously, it is not governed in any degree by a desire to do the specialist a good turn; it is made solely in the interest of the patient, and nobody else should be expected to pay for the attendance that led up to it. While this is the case, however, the specialist certainly has a duty to perform, provided the man first consulted has so managed matters as to enable him to perform it. As things go, there is too much turning of patients over to specialists. If the case admits of doubt at the outset as to whether or not a specialist's services are required, a consultation may be asked for, and in the course of the visit the specialist, except in rare instances calling for continued manipulative treatment, should give the patient to understand that he will not take exclusive charge of the case, but will meet the family physician in consultation as often as may be necessary. There is no good reason why the great majority of cases should not be as efficiently managed, so far as the routine treatment is concerned, by the general practititioner as by the specialist, and the latter should forego taking them away from a competent colleague simply because they come under one or another of the headings in the literature of his specialty.

The second condition pictured by Dr. Black is that in which the patient consults his physician, not with the view of getting his advice concerning his ailment, but simply and avowedly to avail himself of the physician's knowledge of specialists. When that is the state of things, Dr. Black thinks the specialist is under no obligation to pay the practitioner. The selection of a specialist is, however, in itself a valuable service to the

patient, and under certain circumstances, we think, it ought not to be rendered without recompense.

I do not know how it is in Dr. Foster's section, but with us it is certainly the privilege and practice of the physician to decide in what way he will receive the aid of the specialist, i. e., by turning the patient over to him entirely, or admitting him as a consultant only. The latter method, in my experience, is the more common, working often to the latter's disadvantage, as he is usually held responsible for the outcome of the case.

I will next quote some letters of Drs. Black and Greene, which further elucidate the subject:

150 LOWRY ARCADE, ST. PAUL, MINN., Nov. 9, 1898.

To the Editor of the New York Medical Journal.

Sir:—Since writing the letter published in your issue of October 29, I have received a letter from Dr. Melville Black of Denver, Colo., inclosing a reprint of the original paper which formed the basis of the editorial contained in your issue of October 8. Dr. Black expressly disclaims any intention of advocating the payment of fees for reference of cases, save in exceptional instances where a certain amount of service has been rendered by the general practitioner prior to the reference of the case, it being assumed, quite wrongly, I think, that otherwise the family physician would not be able to collect the fee for his services.

In justice to Dr. Black I would ask you to publish my reply to him under date of November 7. I am glad that the Doctor's position is very nearly in line with the general sentiment of the profession, but I am very glad, indeed, that my original letter was written, because I have since learned that this payment and collection of commissions is far more general than I had formerly believed. It is not carried on openly, but wholly in a subterranean way. It seems to depend upon the curious belief that the physician has a property interest in any patient who comes to his office for advice. I sincerely hope that the *N. Y. Medical Journal* will use its great influence to wipe out this stain upon our profession. Now that the matter has been brought to light and is in danger of being brought to the attention of the laity, there can be little question as to its ultimate fate. CHARLES LYMAN GREENE, M.D.

(Dr. Black to Dr. Greene.)

Dr. Charles Lyman Greene, St. Paul, Minn.

Dear Doctor:—Please find enclosed a reprint of the article you so kindly criticised in a recent number of the *N. Y. Medical Journal*. I feel sure that you have not read the article, or your remarks would not be so unjust. You have evidently based your letter upon the editorial in the *Journal* of a few weeks ago. I am inclined to think that if you will read that editorial again, and more carefully, you will find that it did not altogether disapprove of my position. I fully agree with you in all your letter contains relative to paying physicians commissions for referring cases. It was not my intention to make such distinctions as individual cases warranted. I believe that I made that point plain in my paper. This paper was copied almost entirely in the *Medical Record*, with a very favorable editorial comment. I am sorry you did not see that editorial, as it would have given you a better idea of my position. I trust you may see that you have been somewhat hasty in your comment, and that you will take appropriate steps accordingly.

Very sincerely yours,

MELVILLE BLACK, M.D.

(Dr. Greene to Dr. Black.)

Dr. Melville Black, Denver, Colo.

Dear Doctor:—I beg to acknowledge, with thanks, receipt of your reprint, and hasten to acquit you of the major portion of my original charge. I feel very strongly, however, that your position is unsound, and that its adoption, even along the lines indicated, would serve to open the way to a very dangerous form of professional competition. The doctor should certainly be paid for all material services rendered his patients, and I am very sure that he can, and generally does collect from them for any service of the sort mentioned by you. If he does not, I hardly see how he can expect any one else to make his loss good. Certainly the man receiving the case can not safely do so, for the practice of medicine must, like Cæsar's wife, be above suspicion. I think the matter will be thoroughly ventilated in the near future, for I have learned, much to my astonishment, that the actual buying and selling of cases has already come to be far from uncommon, even in high places. It gives me great pleasure to learn that our views are in accord upon the major proposition at least, and I trust you will see the danger and impropriety of any action which might in the smallest degree infringe that rule of conduct which should govern the consultant in his relations with the general practitioner or his fellow specialists. Yours very truly,

CHARLES LYMAN GREENE, M.D.

Dr. Robert T. Morris of New York is next heard from, writing a letter to the editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, excited by an editorial in that journal. (Vide Vol. xxxi, Nov. 12, 1898, p. 1183; Nov. 26, p. 1314; Dec. 31, p. 1581.)

Dr. Charles Lyman Greene replies to these (vide JOURNAL, xxxi, Dec. 3, p. 1376); and Minnesota is again in evidence in two other letters to the same journal, which I think to the point. (Vide JOURNAL, xxxi, Dec. 10, 189-, pp. 1428, 1429; xxxii, Jan. 7, 1899, p. 39.)

An editorial in the *Medical Record* (Sept. 3, 1898), called forth by Dr. Black's paper, says in part:

Dr. Black aptly says that many an obscure practitioner gains standing and even prominence through the specialist. Specialists to whom he refers cases make it a point to speak well of him whenever the opportunity is afforded. This is the only honorable way in which the specialist can return many favors and acts of kindness shown him by the general practitioner. On the other hand, many a specialist can either damn a practitioner with faint praise, or by some remark or even by some mannerism convey to the patient the fact that his treatment previously received at the hands of the practitioner has been far from right. That this is often done, no one who has had much experience with specialists will doubt. The trouble arises from the fact that the two medical men can not always look at a given case from a common point of view. Here lies one evident danger of specialism—that of seeing a case only from the individual standpoint. "The specialist," says Dr. Holmes, "has only one fang with which to seize and hold his prey, but that is a sharp and cruel canine."

A practical difficulty in the arrangement of the scheme proposed is to find a basis on which an equable settlement could be made. Dr. Black does not recommend that physicians should be paid a stipulated percentage of all fees received from cases referred by them. Such an arrangement might lead to greater evils than those it aims to avoid.

In our view, much of the difficulty existing between the different classes of the profession at the present time is due to the fact that every man who reads the papers thinks that he knows at least half as much as the doctors. Between the various domestic remedies mentioned on the "only woman's page" of modern journalism, the semi medical lectures delivered in so many places, etc., the public has become demoralized, and the specialist has been placed in a position which he, if he be a right-minded man, is the last to claim. It would certainly do much to lessen the friction between him and his brother if there could be some well understood principle of relative compensation which would be of universal application. In general, it may be said that most practitioners are on good terms with most specialists. Personal friendships do much to lessen the friction between those who are in a sense rivals, and it is a pity that those elements of character which underlie personal friendship can not be broadly extended to all the relations of those who practice the healing art.

I have endeavored to give both sides of this question, as far as I could by reading the opinions expressed by representatives of different localities, and will close with the statement that I am convinced that we are, to say the least, not above suspicion, and I greatly fear that almost every one of the different phases of this evil could be found to exist right here in our midst.

I have been approached several times, but have never allowed a full-fledged proposal to materialize; foreseeing what was coming I have bluntly shut the gentlemen up, feeling that such a proposition would be a personal insult to me, as much as I would feel that I had insulted a man if I was the proposer.

The remedy to be applied is a "horse of another color," and I sincerely hope a feasible plan will be developed in the free discussion which I feel should at this time follow the introduction of the subject.

DISCUSSION.

Dr. WM. BAILEY—This is a question of great importance, as it pertains to the honor of the profession. I believe that honesty is the best policy, and certainly no man of honesty will want or receive a fee for any service that he has not rendered. I see no reason in the world why the general practitioner, when a case comes under his charge and he gives it the necessary attention to determine first whether it is a case within his realm or that he can successfully treat, if he does it honestly and conscientiously, whether he does the patient any good or not, is not entitled to a fee for the time and attention given; and any fee that any man ought to receive he ought to be willing to make in the regular charge to the patient. I can not conceive how any honest man would receive a fee from the specialist that he would not be willing for the patient to know was coming to him and right by virtue of the time and attention he had given to the case. It is a mistake to have people think that the doctor is only entitled to pay for service that does good. I think we would be deprived of a large source or part of our revenue if we limited it to cases where we actually do the patient much good. We even are entitled to a fee perhaps when the service has been an injury, provided it was the best we knew how to do. As long as a case is under my charge and I am going to give it attention, I am always willing to let it be known that a charge will be made, and shall endeavor to collect a suitable fee according to that service. I can not conceive of any circumstance under which I would feel that I had any right to expect or to receive from the specialist any part of a fee for service that he should render the case.

I do not believe it always necessary that a patient referred by the general practitioner to the specialist should pass entirely out of the hands of the general practitioner. This would be a mistake. We send our patients, for instance, to a distance to seek aid that we are not able to give them. The specialist under such circumstances could not continue the service that may be needed beyond what can be made by his operation; and it would be perfectly proper for the general practitioner to continue the supervision.

So far as the operation itself is concerned, and the immediate supervision of the case at the time of the operation, the general practitioner should give way to the specialist, and not embarrass the surgeon in the immediate management of the case because of any lien or interest he retains, but when it passes beyond the field of the specialist again, by right he ought to give the case back to the general practitioner who has referred it.

If we would pursue such a course we would not find any difficulty; if we would do unto others as we would have them do unto us, we would have no trouble. A course like this would remove much of this difficulty, and if it is as prevalent as indicated by Dr. Vance's paper, it is an alarming state as to the morale of the profession. I am sorry to hear it intimated that even in this part of the country the evil exists to the degree suggested. Personally, I have known of no such thing.

Dr. H. H. GRANT—I have had no one approach me, as the paper read by Dr. Vance indicates is the habit among general practitioners, to ask for a division of the fee. I think it is scarcely the expectation of any of my friends in the profession from out of the city to bring patients here with the expectation of a division of the fee. The greater part of what is contained in Dr. Vance's paper must have been the result of an appeal to specialists who do office practice, rather than to the general surgeon. I can scarcely see how any self-respecting surgeon could for a moment entertain a proposition to do an operation and regulate the charge for it with the expectation of dividing his fee with the man who brings the patient.

It may not infrequently happen that in case a general practitioner has had a patient under his care for a considerable time, who subsequently needs surgery, and who has received much medical attention from the general practitioner previous to coming under the care of the surgeon through the direction of such general practitioner, when the time comes for a settlement it may be considered wise to present the bills together; that is, the general practitioner's bill and the surgeon's bill may be presented together, with the definite understanding on the part of the patient that both bills are to be paid in one, that the bill includes charge for the services of both, and then such division of that bill may be made between the surgeon and the general practitioner as they may choose to make. In other words, I would be distinctly opposed to any conditions of trade prior to operation, or of paying anybody a commission upon business, or of any intimation under such circumstances that special concessions would be made, but after the patient comes directly to the hands of the surgeon, through the aid of any general practitioner, and a good fee is paid for the operation, I can not see any reason why, if it appears wise, the bills may not be presented together and such division be made as may be indicated by the personal relations of the two physicians concerned. In the letter read, Dr. Morris says that not infrequently where he has collected a small fee he has occasionally divided it with the general practitioner. It is a question entirely of the personal relations between the two.

We all appreciate the facts, as Dr. Bailey has related them. Our first duty is to the patient; this applies with equal force to the surgeon, specialist or general practitioner. I do not believe there is a doctor in the city of Louisville, or a reputable man anywhere, certainly no member of this society, who does not first consider the welfare of his patient; and many of us work earnestly and faithfully for the alleviation of suffering without the expectation of any reward. When it comes to the point of actual division of the fee obtained from any patient, in my judgment the only way in which it can be done is as I have outlined. That this can be wrong in any way I do not see; but anything that tends to interfere with either the benefits accruing to the surgeon or the general practitioner, or anything that interferes with the welfare of the patient, needs condemnation.

Dr. J. A. OUCHTERLONY—In reply to the remarks made by Dr. Grant, I do not see that there is any propriety in the bill being sent in conjointly unless the two medical men, the general practitioner and the specialist, are in partnership. The mere fact that they have been in the case together seems to me no reason why they should send in a joint bill. The physician should send in a bill for his services, and the surgeon or specialist should send in one for his. Each should be paid for the service he has rendered and no more. I can not conceive why the physician should receive part of the fee paid the surgeon for services rendered by the latter simply because the case has been referred to him. But the main point in the paper seems to be that there is a practice prevalent of physicians being paid by specialists to whom they have referred cases. I am very sure that this practice is somewhat prevalent in this part of the country as well as elsewhere. A number of years ago a physician, now deceased, said to me: "What do you get from surgeons when you send them cases?" I asked what he meant, and he said: "Why, don't you make them pay you when you send cases to them?" I replied that I most assuredly did not. He then remarked: "They ought to be made to pay, they get much bigger fees than we do." "Well," I said, "that is their good fortune, if we want to get equally large fees we must practice surgery." That was the first time the subject had ever been brought before me in that bold way. That certain physicians from a distance sometimes hawk their patients about after bringing them to the city to be operated upon, I am well aware. How often it is done I can not say, but I have known of instances where the doctor would bring a patient to some surgical friend of mine, then all of a sudden the doctor and his patient would disappear and turn up in the office of some other surgeon. The first question of the doctor is: "What are you going to charge?" When the fee was mentioned the visiting physician would say; "How much is there in that for me?" The surgeon referred to was not a very good financier, though a very honest medical man, and said "nothing." The end was just what I have mentioned. Now it is a not uncommon thing for these doctors from a distance to try and make the consultant, whether he be physician or surgeon, cut his fee down as far as possible, and then they will say, "I will pay it." That has happened to me. The doctor paid me the fee. What may be charged the patient afterward in such cases I do not know. I take it for granted the doctor did not charge the patient any more, but there was a possibility that he might have done so. It is very deplorable that such things should happen, but there is no use closing our eyes to the fact that they do occur, and I do not see how we could possibly legislate such a state of things out of existence. The only way is to elevate the morale of the profession by seeing to it that those who are already in it and occupy high places should set a good example, and as far as possible exclude men who are applicants for degrees from entering the profession unless we are satisfied that they are men of good moral character. Poverty is very demoralizing, and often men will do things under stress of poverty that they would not do otherwise. Still, we can not make them honest by legislating, any more than we can make them virtuous, and I do not see where the remedy is to be found except in that rather remote, indirect way that I have mentioned. I am sure that the various surgical friends of mine present must have met with the same experiences that some of the letters read set forth.

Dr. J. G. SHERRILL—I do not like to believe that this evil has grown so prevalent as it seems from some of the letters read, but that there is such an evil I am fully aware. There

are three things to be considered in this connection, viz., the surgeon or specialist, the physician, and the patient. The medical profession has through centuries attempted to keep on a high plane, and the interests of the patient have been protected in many ways. The physician is many times the patient's adviser and friend, and whenever you commence to introduce the commercial spirit in matters of this kind, the relations between the patient and physician are materially changed and you are bound to lower the plane of the profession. Moreover, if the physician renders the patient any service he should be paid in accordance with the work he does. If this physician then finds that he is unable to successfully treat the case, whether from lack of appliances at hand, or from lack of sufficient practice to acquire adequate skill in certain lines, he turns the patient over to a surgeon or specialist; then if the surgeon operates upon or otherwise treats this patient, he is in his turn worthy of a fee, and this fee should only be in accordance with what his service has been to the patient and what the patient is able to pay. Frequently all of us do work for patients who are unable to pay anything, and our charges must be made in accordance with the ability of the patient to pay, and some patients must pay more to make up for the deficit of others who are unable to pay anything. If the surgeon includes in his bill sufficient to cover the amount due the practitioner, without notifying the patient, it places him in a very unfavorable position; the patient goes away with the idea that the surgeon has overcharged him, that he is demanding more than he really ought to receive for his services, while the surgeon is not getting any more than he should, if as much, and the physician gets a fee without the knowledge of the patient, the physician being paid for his attendance upon the case out of the amount collected by the surgeon. In this way the surgeon would often either rob himself or be compelled to rob the patient to present the practitioner with a commission. If this practice should extend and become general, you can readily see how it would be looked upon by the patient—he would have no respect either for the surgeon or the practitioner. If the patient were to know that his physician was guilty of such a practice, he would certainly send for another doctor, and if any surgical work were needed, if the surgeon previously employed were known to be guilty, he would certainly send for another surgeon; and this is exactly what he should do. If this practice becomes at all general the people are certain to know it and great harm will be done not only to the individual, but also to the profession. The people will not only have less confidence in their physician or surgeon, but will have less faith in the medical profession at large. I can see only one way to remedy the evil, and that is for every honest professional man to frown upon the practice, and when they have proof of the existence of such a state of affairs, I believe it to be their duty to report it in open meeting. I do not believe he ought to keep it hidden; it should be brought to light in a plain, open-and-above-board manner before the society, letting the profession know what men are doing things in this way. I believe we can stop it by this means quicker than in any other way.

Dr. L. S. McMURTRY—I am satisfied that the evil of paying commissions for the referring of cases is more common in eastern cities than it is with us. I have had a rather extensive experience in special practice, and a considerable proportion of the cases I have are referred to me by other physicians. Individual experiences may give some light as to the condition of affairs in our own bailiwick, and I have never had but one proposition to pay a commission. I have had the physician in the case write me a letter stating that he had a case of a certain character that he was contemplating referring to a specialist, and asking point blank how much I would allow him of the fee if he would refer the patient to me.

Two years ago I met in Europe a distinguished surgeon of one of our eastern cities, and conversing on various phases of professional life, he told me that this matter of paying commissions for the referring of cases was very common in his city, that, whatever I might think of it, the surgeon was compelled to do so, and he said that he did it. He is a man of distinction in the profession. I was very much surprised, and it led me to believe that the practice is very much more common in the large cities of the East than it is with us here. I believe the practice is exceptional here, though I have good reason to know from certain methods of observation suggested by Dr. Ouchterlony, that such instances do occur here, but I think they are rare.

In regard to the letter of Dr. Morris, it is an excellent illustration of what a humorist he is. I refer to his illusion to $5,000 and $2,500 fees. Dr. Morris is a very versatile writer and is ofttimes humorous.

There are other phases touched upon by Dr. Vance that are great evils, and they should receive consideration from gentlemen engaged in special lines of practice, and I know what I am going to allude to now is familiar to every gentleman in the room, that is, that the practitioner who refers the case to the specialist is directly interested in serving his friends among whom he practices, in having charged the lowest fee for the specialist's services, with a desire to befriend his patient, and is led to make statements which are not exactly correct. This is done with the idea that the specialists get larger fees than they really do. Many practitioners think that specialists in every department get larger fees than they do. They have an idea that we charge according to some standard that makes no discrimination, consequently they begin to prepare for it as a service which they imagine they should render to the people who are under their care. This is likely to work a great injustice, because a man in excellent circumstances, one who is able to pay a regular fee, such a fee as would be fair and just to the specialist, may be pictured by the practitioner as unable to pay a reasonable fee, and in this way the pay is not compensatory for skilled work.

In regard to the paying of commissions downright, simply having it understood with certain physicians that if they will bring their surgical cases to certain surgeons they will be paid so much for each one—I do not believe that occurs with us here except in rare instances. In regard to the charges of the physician and those of the consulting surgeon or specialist, I agree with Dr. Bailey that each one should charge his own fee and collect it. This is the better policy; it is better for both the physician, the specialist and the patient; it makes a better impression, and everything that is in the way of perfectly open, frank and straightforward dealing with the patient is the best policy. Naturally every patient, and almost every physician who has a patient to refer, wants to know beforehand what the surgeon's charges are going to be. It is puzzling to know what to say to them. You do not know what the case is, and the physician himself has perhaps only a general idea as to whether any operative treatment will be required; yet he wants to know before the patient is referred to you what will be your charge. One single visit may be required, or the case may require a protracted course of treatment; it may be an operable or an inoperable case; no one can say before the patient is examined. Whenever it is possible, after seeing the patient and the course of treatment has been determined on, it is best to state just what the charges will be.

If the surgeon or specialist cultivates the commission business it will become known, not only to his colleagues, but to patients. The practice is indefensible and is certain to injure the reputation of those who engage in it. When the physician and surgeon, the physician and consulting physician, or the physician and the specialist are working jointly, each should be paid for his services in proportion to the means of the patient, and their bills should be rendered separately; everything in connection with the transaction should be open and above board, and it will be better for the reputation of the profession and the individuals connected with it.

As to the remedy for these evils said to exist, I do not know that anything can be said more than has been stated by Dr. Ouchterlony. The cultivation of a professional spirit and opposing commercialism and insisting upon honest business methods, is the only way to do this. The cultivation of a high order of professional sentiment and the hearty co-operation of physicians, surgeons and specialists, will do more toward correcting the evils that exist than anything else. The interchange of views upon this subject is certain to do much good. It will have a tendency to elevate the medical profession in all of its business aspects.

Dr. JAS. B. BULLITT—The subject under discussion is an evil which is so potent, and I might say patent, that I am sure everyone present is aware of it. The whole subject is so foreign to all ethic principles that it would seem to scarcely permit of anything being said. When we remember the Hippocratic oath, and take into consideration the medical profession since its inception, from the early days when mysticism represented the whole of the medical profession, the tendency of the profession has always been one of utmost honesty. The profession has always been made up of those who should command proper respect in the community in which they lived. The whole thing hinges upon honesty, and I believe that Dr. Vance has struck a very hard blow which should make a dent, but whether the reverse side of the shield will be any better for the dent which he has made I am unable to say.

It is quite true that surgeons have an opportunity of verifying what he has said, that frequently propositions are made, or more than half made at least, looking toward a division of fees, as has been charged in the papers quoted by Dr. Vance; and the reason that these propositions have continued to be made is because they have not met with the reception with which

they deserved. It takes two parties to perpetuate an evil of this kind, and if the surgeon or specialist is unwilling to accept a case and in return pay a commission therefor, such a practice could not exist; but this certainly has not been the case. Perhaps we would as well not speak of where such a practice does not exist, but speak of the section in which we live; it is a matter quite patent to all who have knowledge of such dealings, that there are men who will not only divide fees, pay commissions, etc., but who will make direct overtures for the reception of such fees on the ground that if the patient were sent to others a division of the proceeds would not be allowed.

Division of the fees, spoken of by Dr. Grant, might be regarded as proper under some circumstances, although as indicated by the remarks of several of the gentlemen, I believe it would be an impolitic arrangement; it would be an arrangement which would allow a man to indulge in this practice which we are trying to avoid. In much that has been said tonight, and in the papers quoted by Dr. Vance, we are led to believe that the fault lies not so much with the surgeon or specialist as with the general practitioner. This is perhaps not true. While the practice may be encouraged on the one hand, it is also permitted on the other, and therefore I believe it would be wise to cast the beam out of our own eye before attempting to cast the mote out of the eye of the general practitioner. As regards the ultimate remedy for such an evil, as suggested by Dr. Ouchterlony, it does not exist. Medical legislation, as proposed by Dr. Morris, would be absolutely inadequate; it would simply direct attention to the evil and might be productive of good in this way. Such a paper as Dr. Vance has read is calculated to do the same thing; attention should be called to these practices, and the search-light should be turned on them, with the hope that the evils will be discontinued.

If a division of the fee is made, it always results in detriment to the surgeon and to the financial gain of the physician, rather than always to the detriment of the patient. I mean that it is a very much easier matter for the surgeon to take a certain amount out of his pocket and give to the practitioner in a case of this kind than it is to make the patient pay a larger fee. We know it is a difficult matter to get patients, in this section of the country at least, to pay large fees, fees which we believe our services are justly deserving of, and if we were to further divide this fee with the general practitioner, it would work to the detriment of the surgeon always.

Dr. WM. CHEATHAM—In twenty-two and a half years of practice in the city of Louisville, I have never had the commission proposition made to me but once. In this instance a gentleman from a distance wrote me regarding a case, asking what his commission would be. In reply to my letter refusing to consider the matter, he gave a very satisfactory explanation, and I believe he was sincere in it. He has since been a good friend of mine. I know such practices exist, but this is the only experience I have had.

Dr. H. A. COTTELL—In all my experience with specialists—and I am a sort of half specialist myself—I have had such a proposition made to me but once. A certain gentleman sent a patient to me to be treated for some nervous affection and suggested in return that a percentage of the fee collected would not be refused. Much of this sort of thing is going on among a certain class of doctors, men who could not gain entrance to this society.

The subject has been most admirably presented by Dr. Vance and has been most wisely discussed. That the evil exists there can be no question, but I do not believe it exists in high circles; there ought to be a remedy, and the plan suggested by one of the writers, of having the AMERICAN MEDICAL ASSOCIATION frown down upon it, is a most excellent idea. It has always seemed to me that we ought to have in Louisville—I know several attempts have been made to establish such an institution—a strong representative medical society that would fix the ethic aspects of matters of this kind, that would discipline its members if they broke over the rules, a society to which every reputable man of the city might belong, and to which he would wish to belong. Such an organization as that would do a great deal in the way of correcting abuses such as these. The spirit of commercialism is bound to enter our profession; we may hold ourselves above it, which we ought to do as far as possible, but it is in every line of business, and so long as medicine is considered as a business, men will be found who would be willing to prostitute it for business purposes.

Dr. T. C. EVANS—I am thoroughly in accord with what Dr. Bullitt has said, that the fault lies more with the surgeon and specialist than with the general practitioner. So far as the local condition is concerned, my experience is that the general practitioners who have a good business of their own are not engaged in dividing fees. The practice is almost entirely with what might be called "shysters," who stand in with some of the surgeons who stand high in the profession; these surgeons say to those on the outside: "For all the cases you bring to me for operation I will give you a certain percentage of the fees collected." Such things exist here as well as in neighboring States. Only a short time ago I was in one of the towns of the central portion of the State, and a physician there told me of an offer that had been made to him by a Cincinnati surgeon. I was particular to ask him if only the gentleman in Cincinnati had suggested a division of fees, and he said the same offer had been made him from Louisville, viz., if he would send his patients to a certain surgeon he would get a proportion of every fee. Within the last year I was approached in a similar manner by a man who was recently graduated from one of the medical colleges here. He did not expect to practice medicine; by occupation he was a stock trader, and lived in the western part of the State. He came to me with the plain proposition as to what per cent. I would allow him on business he might send me. I told him I would not give him a cent. He said he had been to see several surgeons who offered to give him 25 per cent.

In regard to Dr. Morris' paper, I should say that he is rather innocent, and he surely has not traveled over the city of New York. We all know that the commission evil has not only extended to the surgeon and general practitioner, but it even extends to undertakers as well. As to the gentlemen who speak here, they assume an innocence that is not genuine; I am sorry to say that this is true.

Dr. LOUIS FRANK—Probably those of us who practice surgery are more familiar with it than those who practice general medicine, but we all know that the practices outlined in Dr. Vance's paper exist. There is hardly a surgeon in Louisville who has not been approached in some manner for a division of fees. As to the cause which has brought about this state of affairs, it is due to the active competition, the commercial spirit, which has invaded the practice of medicine, particularly among surgeons. This practice is not confined to one section of the country, certainly not to Louisville, though I know it does exist here, from letters I have received from parties out of town; it is not an uncommon thing for general practitioners out of the city to write to the various surgeons and obtain prices upon work that is to be done, and ask what commission will be paid them for each case sent, etc. The entire blame for this state of affairs, the division of fees, from the first falls upon the surgeon himself. I do not believe it is so largely the fault of the general practitioner, but equally so of the surgeon, and if there was less of the commercial spirit and more of the true professional spirit this reprehensible practice would be entirely done away with.

Dr. J. M. RAY—I have never had any personal experience in the division of fees, but there is one phase of the subject that has not been touched upon, with which I am somewhat familiar and of which I have illustrations too numerous to mention. It is the custom which is prevalent in this part of the country for the doctor to write to two or three different specialists with reference to a patient and get their opinions, after giving a description of the case, and also getting their prices for certain operations thought to be required. Take operations about the eye, for instance, enucleation. A patient desires that an eye be removed for the relief of some pathologic condition; the doctor in charge writes to two or three men and gets their price for such an operation. I have within the last two or three weeks had an experience of this kind in which a man wrote me to know what I would charge for a certain operation; in the letter he also stated that he had already written to two other gentlemen and had their prices for the same work, and he went on to say that he was a friend of mine, that the patient was a personal friend of his in whom he was much interested, and would like to know if I would not, through my personal relationship with him, perform the operation and take a smaller fee than the gentlemen who had previously been consulted with reference to the matter. I answered him very promptly that I would not, under any circumstances, perform the operation for him any cheaper than others had offered.

Another practice similar to that is where the doctor brings a patient to your office, and in the presence of the patient tells you that the patient is a personal friend of his, that he wants you to make the fee as small as possible, that he (the doctor) will pay it, and then after the service is rendered, for the doctor to take you to one side and say that he expects you to charge what you think is right, that he will pay it and settle with the patient himself. And it has been my experience in two instances where I know that the doctor has charged the patient more than the fee he paid me at the office.

Another feature is that a doctor from a distance brings a patient to the specialist's office, and especially does this occur

with those of us who are connected with medical colleges, where we are to a certain extent anxious to obtain a first class quality of clinical material, and the doctor being aware of this, will frequently bring cases that are perfectly able to pay a fee, with the explanation that the patient is absolutely unable to pay a fee, but is willing to present himself before the class of students and have the operation performed. In the presence of the patient the doctor gives you a statement of the patient's financial standing, and under the circumstances you feel called upon to perform the operation at the clinic without charge. On several occasions I have heard afterward that the doctor's expenses, etc., were paid by the patient, and in fact I have been told that the patient paid the doctor a fee in addition to his expenses to and from the patient's home. These are simply cases of imposition which the consultant is perfectly unfamiliar with at the time, an arrangement between the patient and the doctor to get the operation performed without the payment of a fee therefor. We are possibly all imposed on in this way, and the fault is not always with the doctor entirely, but with the patient. I know patients are prone to go from one doctor to another, and they will tell you that Doctor So and so charged them a much smaller fee than he really did. I know of many instances of this kind. I have been surprised, based upon information received from patients, that the doctor they mentioned charged such a small fee, which I knew was much less than he was in the habit of charging for the work in question.

As far as the commission evil is concerned, I have had absolutely no experience with it personally.

Dr. AUGUST SCHACHNER—Personally my views are those expressed by Dr. Grant, if I understand them correctly. One speaker criticised his position, intimating that it was perhaps a barrier behind which a lot of work could be done which was not exactly correct, and there is a little truth in that criticism. But after all we can not make anyone honest, and our relations to one another, to patients, etc., depend upon our own honor and honesty, and it is in regard to this question as with all others: if a man has not much honor and honesty, he may practice almost any amount of trickery without being found out, at least for a time.

Referring to the point brought out by Dr. Sherrill, we can not make any hard and fast rules which will apply to all cases. The first duty of the surgeon or the general practitioner is to his patient. Again, upon this, as upon all other ethic questions, sometimes the man who talks the loudest, longest and most eloquently against certain practices may be the one, if the truth were known, who may be subject to the severest criticism.

Dr. T. S. BULLOCK—It is impossible for any of us who practice surgery to deny a knowledge of the existence of the commission evil. My experience has been different from that of some of the speakers. The general practitioner has in every instance that has come to my personal knowledge been the active agent. Propositions have proceeded entirely from him. That it is an undeniable fact that these propositions are made, I know from personal experience, and as Dr. Bullitt has said, the best evidence that they are accepted is that they continue to be made. I agree with Dr. Bailey that the remedy for this evil rests with the individuals themselves, and if every practitioner of medicine and every surgeon be actuated by a sense of honor and honesty, the evil would soon be stopped. If the individual's sense of honor is not acute, he will not live up to the ideal that we should all have. All should consider propositions to divide fees a direct personal insult.

Dr. T. L. BUTLER—My experience has been quite different from those whom I know have been in surgical practice for more than twenty years. Some of them have said that they have never been approached, others state that the commission proposition has been made to them once, etc. I have only been in practice nine years, and such a proposition has been made me many times.

One point made by Dr. Vance does not seem to have been discussed very much, that is the evil of having runners. I have this feature to contend with more than anything else. In two instances that have come under my personal observation, within the last few months, the runners have been the surgeons themselves.

GRADUATES of the regular medical colleges of Cincinnati, for this year, numbered 72; from the Ohio Medical College, 40; Miami, 16; Cincinnati College of Medicine and Surgery, 11; Laura Memorial Medical College, 5. About twenty received appointments to hospitals as internes.

THERAPEUTIC VALUE OF HYPNOTISM.*

BY JNO. R. ROSE, M.D.

EASTMAN, GA.

Hypnotism to-day holds a position in medicine similar to that of electricity before the day of Tripier and Apostoli, before the days of the meter and rheostat, for while the force and its therapeutic applicability are known and can be proven, yet all means of exact dosage are wanting and therapeutic success or failure seems to be in the majority of cases the result of personal experience and individual adaptability, which state of things would go far to explain the different results obtained by different men.

The knowledge of hypnotism seems to date back to the very cradle of mankind, for Egyptian and Greek priests practiced it under the name of "temple sleep," while in the sacred books of Persia and India we frequently find it referred to in the form of autohypnosis, as the following extract from the Persian "Oupneksat" will prove, where it says: "To arrive at the bright contemplation one must, like the turtle, draw all the senses within, close eye, ear, mouth and nose; then Brahm appears with his Atma and like the rivers with the sea we are at one with the world-light." Evidently an autohypnosis similar to the plan followed by the Hesychasts of Mount Athos during the thirteenth and fourteenth centuries. In the "Upanishads," the philosophic commentary on the Vedas, we read of a deep magic sleep in which the manifold makes room for the unity of things, the Nirvana. But even verbal suggestion was known in the Orient, and among the Hebrews one healing by words was called a Shem, the psalms of David and proverbs of Solomon alluding to it in several places, while its existence among the Hindoos and Persians is proven by the following passage in the "Zend-Avesta:" "Many cures are made through herbs and trees, others through water and yet others through words; but the safest cures are through words."

Regarding the temple sleep, practiced by the ancient priests of Æsculapius at his temples in Pergamos and Epidaurus since long before his time, Hippocrates says: "After the soul has been loosened by this sleep, not especially from the body but from the gross service of its component parts, it withdraws within itself as within a haven to guard against storms. It sees and knows then everything happening on the inside and pictures to itself the conditions as if with different figures and colors and defines clearly the condition of the body. Everything," he says in the third book of his De Vita, "that happens in the body the soul sees with closed eyes."

The cobweb festoons of mysticism that nearly obscure the germ of truth the foregoing quotations contain were instrumental in hiding the true nature of these phenomena for ages, and the time when science dared apply the broom does not lie more than a half century behind us.

Since the beginning of history, along the lapse of centuries we occasionally come across records of events that must either be accepted as interventions of a more than human power or rejected as undeserving of credence or else explained as results of hypnotic hallucination, in which category we must place the miracles of Buddha, of Moses and of Mohammed; the healing powers of the apostles and early christians, the mystic powers of the Rosicrucians, magicians,

*Read before the Semi-Centennial meeting of the Medical Association of Georgia, April 19-20-21, 1899.

witches and Indian fakirs and the reputed acts of such men as Albertus Magnus, Paracelsus, Cagliostro and others. The first authentic account we have in modern times of the virtue of suggestion in the cure of disease comes to us from the middle of the seventeenth century when one Valentine Greatrakes of Affane, Ireland, an uneducated man, astonished Great Britain by the miraculous cures he worked by the simple laying on of hands, and a century later we find John Joseph Gassner, a Catholic priest of Swabia, performing miracles of healing in a similar way. It is well worthy of note that in this man we find the prototype of the "Christian Scientists" and "divine healer" of to-day in so far as he professed to cure through the inspiration or the workings of religious faith. Gassner, however, although there seems to be no doubt of his own sincerity, unknowingly used hypnotic sleep and suggestion as his remedy, while his followers of to-day rely entirely on the psychologic effect of their mysterious claims.

The year 1733 marks the birth of a man whose destiny it was to shine with such brilliancy that though he himself was in the wrong and defended a false theory, he yet became the beacon that showed the truth to others. Friedrich Anton Mesmer studied medicine and took his degree at the University of Vienna, then one of the best medical schools in Europe; of studious habits, with a capacity for investigation, yet with his mind tainted by the prevalent mysticism of the times, it was not to be wondered at that he soon evolved a medical theory of his own, in which, failing to recognize the value of suggestion, he ascribed to the action of magnets the phenomena which are now known to be due to hypnotic influence. Meeting in 1776 with Gassner, who was performing the same cures by means of simple manipulations, he soon discarded his magnets as superfluous and from his fertile mind evolved a new theory of animal magnetism, better known as mesmerism. That he made use of all the arts of the quack in order to influence the imagination of his patients there can be no doubt, but neither can it be denied that his treatment abounded in results that must have appeared miraculous to his contemporaries, and though after his death some of his pupils succeeded in producing nearly all the phenomena of mesmerism by gentle manipulation, causing sleep without the mysterious surroundings resorted to by Mesmer himself, it was not until 1841, when James Braid of Manchester, England, began the study of mesmerism with the view of disproving its pretentions, that light began to shine on these mysterious phenomena. His investigations disclosed the fact that a peculiar condition of the nervous system could be induced by a species of mental concentration during which the subject was in a state of automatism and subject to the operator's control; these investigations were published in 1843 under the name of "Neurohypnotism," the first time, I believe, that name is found in literature. He entirely disproved Mesmer's theory of an imponderable magnetic fluid acting through the operator on the patient and explained the phenomena on physiologic grounds. Braid was followed in 1848 by Grimes of this country, with his theory of electrobiology, which created so much attention at the time that, if my information is correct, one of its advocates, Dr. Dods, was called before Congress to deliver a series of lectures that were subsequently published in New York under the title "The Philosophy of Electric Psychology." Another account of Grimes' theory we find in a work published in London in 1851, by Buchanan, entitled "Darlingism, falsely called Electrobiology."

In 1851 also appeared the English edition of Reichenbach's "Researches in Magnetism," a work that will amply repay the time spent on it by the student and which contains, so far as I know, the best exposition of Odyllic force, the supposed universal force of nature. Liébault of Nancy published, in 1866, his "Sleep and Similar Conditions," which may well be regarded as the first scientific treatise on modern hypnotism. He was followed in 1873 by Czermak of Germany, with his observations on hypnotic experiments with animals. Charcot of Paris began his hypnotic clinics at the Salpetrière in 1878, which were of great value in the study of hysteric conditions during hypnosis. Heidenhain of Breslau published a valuable work on animal magnetism, in 1880, and it was he who elaborated and yet simplified the most plausible theory in explanation of the phenomena under discussion. In 1883 appeared another champion of hypnotism, in Bernheim of the University of Nancy, who, following in the footsteps of Liébault, in that year published a paper on "Suggestion." The means and method employed by him and Liébault differed so radically from those of Charcot and others, with results so far beyond expectation, that the article, published in book form with additions, in 1884, aroused considerable attention, and Nancy soon became the Mecca of a number of earnest students and investigators. In 1886 appeared Professor Beaunis' work on "Artificial Somnambulism," followed in 1889 by Liégeois' admirable collection of experiments in "Hypnotism and the Civil and Criminal Law."

This gives but a meager outline of a literature that to-day has its contributors in almost every section of the civilized globe, most prominent among whom are Krafft-Ebing of Vienna, the author of "Psychopathia Sexualis"; v. Schrenk-Notzing of Munich; Germain-Sée, lately deceased, of Berlin; Wetterstrand of Stockholm; Lombroso, Tamburini and Serpilli of Italy, and many others. In our own country, the leaders of our profession have generally occupied a position of agnostic caution toward these phenomena, and since the day of Grimes and his theory of electrobiology, I know of but one work of original research, that of George M. Beard of Boston, who, in 1881 published his "Trance and Trancidal States in the Lower Animals," following the lead that had been given eight years before by Czermak. For the rest we must look to the medical periodicals for literature on this subject, and as far as I have been able to find, there is no superabundance of material; in the majority of instances there are but short, timid accounts of successful hypnotic treatment, while in many of the more extensive articles the subject is handled in a manner that shows strong bias against it. The latest one I have come across is by Prof. Sidney Kuh of Chicago, on "The Medico-Legal Aspect of Hypnotism" (*Am. Journal of the Med. Sci.*, December, 1898). I never saw a better illustration of "Damning with faint praise," and the author arrives at conclusions regarding the dangers of hypnotism in general which really exist only in the method employed, while he tries to sustain these conclusions by evidence that will not bear a critic review. Besides this professional literature our country is flooded with a different kind that is of absolutely no scientific value and

is published simply for the gratification of the love of mystery among the masses.

Of the many theories that have been advanced for the explanation of hypnotic phenomena, there are but three that require consideration. Rumpf gave us the physiologic theory in which cerebral hyperemia and anemia are supposed to cause these strange conditions, while Preyer in his chemic theory, inclines to the belief that mental concentration gives rise to a peculiar cerebral metabolism with production of new chemic combinations that cause somnolence and loss of will-power—a case of leucomain poisoning in fact. The theory that has found the largest number of followers is based upon psychophysiologic conditions and finds it defenders in Schneider and Heidenhain of Germany, and Durand, Liébault and Bernheim of France; Charcot, who of all investigators is best known in this country, through his contribution to Pepper's "System of Medicine," formulated no theory but engaged solely in practical work.

Hypnotism is a peculiar mental or psychologic condition not necessarily resembling sleep, which may be present in one of three different states—lethargy, catalepsy and somnambulism—a classification borrowed from Charcot, but for therapeutic purposes we utilize only the latter, in which, however, we also find cataleptic symptoms due, as Bernheim has pointed out, entirely to suggestion. The three principal phenomena of somnambulism are catalepsy, anesthesia and suggestibility, and as before stated, different theories have been advanced to explain them. Perhaps the most plausible one is what is known as the theory of inhibition, which was first clearly stated by Heidenhain; according to him the phenomena are caused by inhibition of the ganglion cells of the cortex and the higher brain-centers, the inhibition being brought about by gentle, prolonged stimulation of optic, auditory or peripheral nerves. According to this view that portion of the brain devoted to voluntary movements and volition in general is, as it were, thrown out of gear, and the acts that follow in the hypnotic state are automatic and depend on sensory impressions made by the operator. It is conceded that striped muscular fiber reacts normally only to stimuli generated in or passing through the center of volition, each stimulus traveling over a motor nerve-tract to its destination. Now, this center being inactive, it is easy to understand that any position given to the body calls for no volitional effort to make a change, and any position given will therefore be retained by the subject, hence catalepsy. The center of perception, however, being unaffected, a position of the body associated with any special act will call forth hallucination of that act whenever the body assumes that position, simply a phase of postural suggestion. Such a state of inhibition, however, is found in mental conditions that as yet have not been included in hypnotism, but which I believe may well be regarded as states of momentary or temporary hypnosis. We all know that sudden excess of emotion coming in the nature of a nervous shock does sometimes cause temporary catalepsy or aphasia or even amnesia; we speak of a person as "paralyzed by fear, or dumb with surprise," figures of speech that hide a mine of truth and express a mental state that can well be explained by a temporary inhibition of will-power, an absence of mind, in fact, while that peculiar mental quality which counteracts or prevents this inhibitory action of shock has long been known as "presence of mind," proving that the genius of our language with unerring instinct classified these phenomena long before science was ready with an explanation.

The anesthesia found in the hypnotic state is explained on the same lines, the channels in this case being the sensory nerves. We know that normally a sensory irritation, if sufficiently strong, gives rise to a reflex which we call pain, provided the irritation reaches the center for consciousness; but sometimes it happens that for some reason or other this irritation flies the track and is switched off to the spinal centers, which then set up a motor reflex resulting in muscular twitching, spasm or even contractures. If the higher cerebral centers, included in the center for consciousness, are in a state of inhibition during deep hypnosis, it is impossible for the organism to recognize pain, and if any reflex at all is set up it must travel in motor channels. Such, indeed, is the experience of Chambard and Charcot, with gentle stimulation or irritation, while others, principally among them Bernheim, have placed themselves on record as unable to elicit any motor reflexes except through suggestion. I have tried very patiently to follow the experiments of Charcot, but during deep hypnosis I have never met with a muscular reflex upon gentle irritation that could not be referred to some accidental suggestion; while in the lighter stages of sleep, before all spinal reflexes are abolished, almost any sudden, strong, peripheral irritation will result in muscular reflex without pain. This is in line with Vulpian's experiments on a decapitated frog, and proves the independent, automatic action of the spinal centers; for in hypnosis the higher centers are in abeyance, and the deeper the sleep the lower are the centers dominating the organism, till in lethargy he is kept in a state of simple vegetation through control of the centers in the medulla and cord.

The reasoning faculties are only apparently set aside during hypnosis or else the sometimes strong and apparently intellectual resistance to undesirable suggestions is the result of instinctive cerebral action; nevertheless they are greatly interfered with and react only to strong stimuli. The lower brain, therefore, but little restrained by the intellectual centers capable of discriminating, of accepting or rejecting, shows a great willingness to at once translate visual or auditory impressions into action, apparently glad to be free from this restraint of the intellect or will-power, and in that way the many queer hallucinations depending on suggestibility may be accounted for. Let me for example say to a hypnotized person that he is about to step on a snake, and the impression traveling over the auditory nerve to the sensory center for hearing, calls into life the mind-picture of a snake, which has been stored there by the long and close association of sound and sight; this picture is at once reflected to the retina and causes the subject to see a snake right under his feet; to him this mental snake is as real as any he has ever seen, and he will jump back with every evidence of horror.

It is safe to say that almost every investigator has a method of his own for producing hypnosis, and this at first confuses the student who tries to find the best; it will soon appear to him that all can be referred to three great classes—the fixation method of Braid and Charcot, the method of verbal suggestion of Liébault and Bernheim, and third, a combination method of

these two. In the first method the subject is, by means of a slight nervous shock, at a moment of mental concentration and expectancy, thrown into a condition of somnambulism or sometimes even catalepsy or lethargy; it is applicable principally to persons of unstable mental equilibrium, as found in hysteria and allied neurotic conditions, while in persons of normal nervous organizations it is apt to fail. This method is undesirable for several reasons; it is applicable to only one class of subjects with anything like certainty (Charcot claims about 25 per cent.), and besides it can be easily imagined how a nervous shock, however slight, administered to a person with an unstable nervous organization, at a moment of mental tension, may result in all kinds of undesirable mental and nervous phenomena, such as fainting, convulsions, insanity, or even death, a line of reasoning that is proven by actual experience. The method of verbal suggestion is the ideal method of producing hypnosis and it has only one objectionable feature that might make it undesirable for the busy physician. It sometimes requires the expenditure of much time and the exercise of unlimited patience before the subject can come under the control of the operator, Bernheim citing a case where he succeeded only after more than seventy fruitless trials, an exercise of patience that surely deserved success. It is, however, applicable in all cases, without fear of evil consequences; in fact, granted plenty of time and patience in both subject and operator, there will be found but few who do not finally come under the latter's influence; Liébault found 27 in 1011 cases, and Wetterstrand reports 97 failures in 3148 cases. For the physician who has no time to waste in fruitless experiments, the combined method will be found the most convenient, and the more the element of shock is eliminated the less element of danger will it contain. In a normal subject there is never any danger, provided the operator knows his business and is himself normally constituted, but even in hysteric and neurotic subjects all unpleasant results can be prevented or overcome by the confidence and knowledge born of experience. Subjects suffering from cardiac lesions or epilepsy should never undergo the psychic excitement of hypnosis except at the hands of one fully conversant with its power of control, for to lose one's presence of mind in such cases is apt to result in unpleasant experience to the operator and danger to the subject.

When hypnosis is produced, the patient may be in a condition of sleep so slight as to be unperceived by himself, or he may be in a stage of deepest somnambulism, or anywhere between the two extremes; the best classification of the different stages of hypnosis has been given by Bernheim, who divides it into two principal classes depending on the condition of the patient's memory after waking; each of these he divides into stages, nine in all, and gives the tests for their recognition. All, except perhaps the first, are of therapeutic value, since in them the subject is open to suggestions, the therapeutic agent used in this treatment. Total anesthesia frequently exists in the deeper stages of sleep without suggestion, and it was this phenomenon that first attracted the attention of physicians and surgeons even before the days of chloroform.

Dr. Charpignon collected and published the following operations under hypnosis: Amputation of breast, by Jules Cloquet in 1829; amputation of leg, by Loisel of Cherbourg, in 1845; extirpation of parotid gland, by Loisel of Cherbourg, in 1846; double thigh amputation, by Fanton and Toswell of London, in 1845; amputation of arm, by Joly of London, in 1845; removal of tumor of maxillary bone, by Ribaud of Poitiers, in 1847; Broca and Follin reported to the Paris academy, in 1859, an operation for perirectal abscess, and Guerineau of Poitiers, in the same year, a thigh amputation, all done during hypnotic sleep.

That in spite of these glorious results obtained more than half a century ago, such a remedy should have fallen into disuse and even become a *terra incognita* to a large number of the profession can be explained only by the quicker and more satisfactory results obtained by chloroform and ether, remedies that came into use about that time and before the anesthetic properties of hypnotism had become generally known. No modern writer on this subject has ever suggested this remedy in capital operations, and for very good reasons, for the degree of sleep necessary for the abolition of all motor and sensory reflexes can not be obtained in every case; but I wish to say that in all minor surgery requiring anesthesia, and especially in the minor surgery of gynecology, it is the remedy without a rival. By its help I once divulsed the sphincter for irritable ulcer of the rectum without the patient interrupting her conversation with a friend present; she simply felt nothing. But this is not by any means my experience in every case, for suggestions of painlessness frequently fail in operations on the rectum requiring wide stretching, and the patient may show signs of uneasiness, emit groans or have stertorous breathing with a somewhat confused memory of suffering on awakening. It is well known that wide stretching of the sphincter is a powerful stimulant, especially to the respiratory center, which respiratory reflex is not always overcome even in deepest chloroform narcosis; hard, harsh or stertorous breathing is also a common symptom of severe suffering, so I have come to the conclusion that the apparent suffering in these cases is due to autosuggestions brought on by the respiratory reflex, due to stretching of the sphincter; if such is the case it ought to be overcome by proper suggestions, and I am only waiting for material to test this matter thoroughly.

Plastic operations on the perineum and cervix, under hypnosis, must be seen to be appreciated, for when we bear in mind that in that condition the operator not only controls his patient's thoughts but her muscles as well; that when he places her in the lithotomy position she has no desire to move without his permission; that she does not get tired in this position within any reasonable length of time, say an hour or two if necessary; that at the same time she may appear to have all her faculties about her, and at the operator's desire may converse with any one present; that, though the surgeon plies his painful task of cutting, trimming and stitching, the patient is supremely unconscious of pain or suffering; that the number of assistants is reduced and leg-holders or other contrivances are done away with; yes, that the patient herself may be made to assist in the operation by holding instruments handy for the operator's reach; when we bear this in mind, I say, then we may form a faint idea of the value of hypnosis under such conditions. Nor is this picture an imaginary or suppositious one, for I have tried it myself, in trachelorrhaphy, amputation of cervix and perineal operations, both denudation and flap varieties, with the happiest results. Not

only is the operation done without pain to the patient, but in this class of cases post-hypnotic suggestions are of great value in producing rest, quiet and relief from pain during convalescence. I am in the habit of letting my patients sleep for six hours after such an operation, when they awake at the appointed time feeling refreshed and easy without a trace of nervousness or nausea. This latter will be appreciated by all who have been doing perineal or rectal operations under chloroform, where the resulting nausea frequently puts the sutures to a severe strain.

(To be continued.)

Correspondence.

International Congress Against Abuse of Alcohol.

HARTFORD, CONN., May 6, 1899.

To the Editor:—In these times of great international gatherings it will be news to many persons that the alcoholic problem has been the theme of seven great continental meetings in Europe, held at intervals of two years, since 1885, the seventh having been held in Paris, April 4 to 9. From the first they have been made up of a large number of physicians, clergymen, teachers and reformers generally, and have steadily grown in interest and size until the Paris gathering, which assumed in reality the proportions of a great world's congress.

Sixteen hundred and forty members were registered, which included over one hundred physicians and six hundred professional men and women, government officials, laymen, reformers and society delegates.

The topics discussed have been very complete, ranging all the way from the most passionate appeals to give up alcohol, with terrifying pictures of its effects on body and mind, up to the most critic chemic analysis of different alcohols and the most exhaustive statistic balancing of figures and reports.

The Belgic minister of justice, whose position corresponds to that of the chief justice of the U. S. supreme court, presided at several sessions.

Dr. Legrand, a noted specialist and superintendent of lunatic asylums on the Seine, was the president; the French minister or secretary of State occupied the chair at two meetings, while a number of very high functionaries presided at the different meetings and expressed themselves with much earnestness.

Invitations to attend this congress were sent to every known leader and writer on any phase of the alcoholic problem in the world, responses being received from nearly two thousand persons. I was appointed to muster the American contributors and delegates to this meeting. Three physicians, two editors, one army officer, three teachers and clergymen appeared to represent America, and about twenty papers were offered. The congress committee seemed to be very cautious, and only gave abstracts in French of a few of the leading papers offered, and were clearly able to discriminate their value.

Among the American papers which attracted considerable attention were those of Drs. Davis, Mason, Brower, Kellogg, Sheperd, Manly, Hughes, and Crothers. The president announced that the American contributions and papers showed most positive proof that they led all the world in this field, as they did in other things. This was more than a compliment, as the forthcoming volume of Transactions will show. Of course, the moral and ethic sides of the subject were most prominent.

A cardinal and two bishops of the Roman Catholic Church made eloquent speeches, and official representatives of the governments of France, Belgium, Germany and Switzerland spoke at some length. The congress was divided into sections which held separate meetings, and the general session was held in the afternoon and early evening. The meetings were all held in l'Ecole de Médecine, and the various halls and amphitheaters were crowded.

One very significant fact brought into prominence was that France consumes more spirits than any other nation in the world. The rate for 1898 was 13 liters to each person, including wines, beers and strong liquors. In one province of France there is a saloon for the sale of wines and spirits for every three male persons. Insanity, pauperism and crime are increasing so rapidly that the governments are alarmed.

The following table was given as authentic, to show the actual amount of spirits, including wine and beer, consumed by each person in the different countries:

Country.	Liters per capita.
France	14.19
Belgium	10.50
Germany	10.50
British Isles	9.25
Switzerland	8.75
Italy	6.50
Holland	6.25
United States	6.10
Sweden	4.50
Norway	3.50
Canada	2.50

To show the changes, Sweden in 1849 drank 21 liters a year to each male inhabitant; in 1898 this had fallen to 4½ liters to each man. This result has been attributed entirely to education and agitation, with government control.

Several of the Paris papers were very pronounced in their editorials on the need of this congress and the danger of alcohol. The *Figaro*, not a temperance paper, but one of the great influential dailies, announced in headlines the following:

Alcohol is death to the race. Alcohol will kill emperors, as it has killed the native tribes of every nation of the world. Alcohol means disease, means tuberculosis, means decay, sterility, impotence; it is another word for wickedness, cruelty, vice, and insanity; it means misery and the downfall of nations, and the best way to prove patriotism and to be useful to one's country is to fight against alcoholism.

The medical journals made only brief references to the congress, and later some of the papers read will appear. A daily bulletin was published, giving abstracts of all the papers and some of the discussions. The Transactions will appear in a huge volume later.

One of the many new topics was the influence of climate on the poisonous action of alcohol. Some alcohols become rapidly intoxicating in certain climates, other climates repel the intoxicating action. Some drinks are dangerous at different seasons of the year, and so on. Another topic was the influence of food in early life, predisposing to alcoholism later. Tuberculosis following the injury from alcohol and its fatality was the theme of considerable discussion.

The subject of asylums for inebriates was treated at some length, the fact being brought out that Switzerland has more asylums of this class in proportion to its extent than any other country in the world. England has recently opened several asylums for the reception of criminal inebriates, and passed laws giving judges power to commit to them rather than to prisons. Hypnotism came in for a large share of attention, and the bath cures and other measures were mentioned at some length. A great deal of enthusiasm gathered about the instruction of the young in temperance physiology, and many papers and discussions followed.

It would be impossible to give any clear idea of the many topics presented and the intense enthusiasm of all the discussions which followed, and a great deal of it would have but little medical interest except physiologically. From this point of view the congress was really one of the most significant gatherings of the closing years of the century. It shows that Europe is becoming alarmed, and that a deep conviction is

growing that the evils from alcohol must be taken up as a great sanitary and medical topic. The recognition of the medical side of this evil, and the physical means required to cope with it, showed a great advance.

While this gathering was not particularly notable for new facts, it gave greater eminence to old theories and greater prominence to the need of more accurate study of this evil. There was something very stimulating in this hearty union of all classes for the study of the evils of alcohol; while many different societies and church associations have conflicting theories of the causes of and remedies for alcoholism, they all argue that certain general physical causes are traceable to it and can be removed.

The leading continental physicians and teachers are very emphatic in calling alcoholism a disease and urging medical treatment. The continental physicians appear to have much influence with laymen on matters of social and sanitary science, and hence are put forward prominently as leaders.

In the sectional meetings physicians were given a deferential hearing, more so than clergymen, and several French and Swiss physicians displayed unusual oratoric powers. A congress of this kind would be a great help to clear away the confusion which hangs over the subject in this country. Hundreds of physicians would welcome a general scientific study of this subject, and a public sentiment that would encourage efforts to find causes and remedies for this evil.

The foolish unfounded theories which cling to this topic are fast disappearing in Europe, and wine and beer drinking is as freely condemned as the excessive use of stronger spirits. Physicians, above all others, should teach the facts, and not be taught by laymen, or fear the popular opinions of persons who have little or no accurate knowledge.

T. D. CROTHERS, M.D.

Competitive Examinations.

CINCINNATI, OHIO, May 2, 1899.

To the Editor:—The letter of Dr. Bayard Holmes in last week's JOURNAL (see April 29, p. 927) meets with my hearty approval. I am and long have been convinced that a written examination, as an exclusive means of determining qualifications in any department, is fallacious. As a means of determining the ability of candidates for hospital interneships, it is strikingly defective. I have no objection to written examinations as *one* way of finding out what a person may know, but they ought to occupy a subordinate place in the general plan of investigation. The reform method should embrace all that is now included in the written examinations, plus test exercises in the laboratories, in the mortuary and at the bedside of the sick. When this comprehensive plan is adopted, examining bodies may ascertain approximately what candidates may or may not know, and that is more than can be said of the present method.

Another pernicious feature of the present system is the preliminary coaching to which intending applicants for hospital positions are subjected. If the mere cramming process were all of it, it would be bad enough, but it is not. In more than one city of my knowledge students are requested at the time of matriculation to declare their intention of going in for interneships, and great rivalry exists between schools to score the largest winnings before these more or less farcical concerns. Students who enter for the race are coached from the beginning, not with the object of giving them a broad, symmetric and logic medical education, but with the object of making them familiar with the peculiar views of individual members of the examining body. Lists of old questions are a part of the stock in trade of professional coachers. Students are encouraged to miss regular lectures that may not have a direct and apparent bearing on the prospective examination. They are then permitted, in certain cities, to go up for the examinations at the end of their junior year, returning to their respective schools for the finals, a twelvemonth later. They then get their diplomas after an actual attendance at the colleges, of probably less than two years, all told. When they go to their State licensing bodies for registration they all present certificates of actual attendance on four full courses of lectures in four separate years! How can these things be? Who knows? But what it is, and this that is, is a matter for the licensing bodies. It would not be in the least malapropos on the program of the coming meeting of the Confederation of State Examining and Licensing Bodies. It might not be amiss if Dr. Bayard Holmes' own organization, the Association of American Medical Colleges, would also throw its search-light in this direction. It would certainly be fruitful of better results than the recent endeavor to ostracize first-class medical college men who conducted three-year schools and were honest enough to say so. R.

Revision of Pharmacopeia.

PHILADELPHIA, May 1, 1899.

To the Editor:—In accordance with instructions given by resolutions passed at the National Convention for Revision of the Pharmacopeia of the United States of America, held in Washington, in 1890, I herewith give notice that a general convention for the revision of the pharmacopeia of the United States of America will be held in the City of Washington, D. C., beginning on the first Wednesday in May, 1900. It is requested that the several bodies represented in the convention of 1880 and 1890, and also such other incorporated State medical and pharmaceutic associations, and incorporated colleges of medicine and pharmacy, as shall have been in continuous operation for at least five years immediately preceding this notice, shall each elect delegates, not exceeding three in number; and that the surgeon general of the army, the surgeon-general of the navy, and the surgeon-general of the marine-hospital service shall appoint, each, not exceeding three medical officers to attend the aforesaid convention.

It is desired that the several medical and pharmaceutic bodies, and the medical departments of the Army, Navy and Marine Hospital Service, shall transmit to me the names and residences of their respective delegates, so soon as said delegates shall have been appointed, so that a list of the delegates to the convention may be published, in accordance with the resolutions passed at the 1890 convention for the revision of the pharmacopeia, in the newspapers and medical journals in the month of March, 1900.

Finally, it is further requested that the several medical and pharmaceutic bodies concerned, as well as the medical departments of the army, navy and marine-hospital service, shall submit the present pharmacopeia to a careful revision, and that their delegates shall transmit the result of their labors to Dr. Frederick A. Castle, 51 West Fifty-eighth Street, New York City, secretary of the Committee of Revision and Publication of the U. S. Pharmacopeia, at least three months before May 2, 1900, the date fixed for the meeting of the convention.

H. C. WOOD, M.D.

President of the National Convention for Revising the U. S. Pharmacopeia, held in Washington, D. C., A.D. 1890.

No Smallpox in Uniontown.

UNIONTOWN, PA., May 6, 1899.

To the Editor:—Under the caption of "Medical News," in the JOURNAL of May 6, you state Uniontown has eight cases of smallpox and that the government has ordered all mail fumigated, and that the freight and traffic business has been suspended.

I have been practicing medicine at this place for the past fifteen years and during all that time this is the first that I have ever heard that we had any smallpox. Allow me to correct

your statement and say that there is not and has not been any smallpox at this place for the past twenty years.

Very respectfully, JACOB S. HACKNEY, M.D.

[The correspondent who furnished us the item referred to will not repeat the offence.—ED.]

Current Medical Literature.

Titles marked with an asterisk (*) are noted below.

Chicago Medical Recorder, April.

1.—*Value of Resection of Sympathetic Ganglia of Neck in Cure of Epilepsy. Carl Beck.
2.—*Remarks on Histopathology of Syphilis. Maximilian Herzog.
3.—*Extragenital Chancre. L. Blake Baldwin.
4.—*Remarks on Primary and Secondary Syphilis. David Lieberthal.
5.—*Gummata and Chancre Redux. Henry G. Anthony.
6.—*Treatment of Syphilis. R. R. Campbell.
7.—*Seven One-Minute Points on Syphilis of the Nervous System. Hugh T. Patrick.
8.—*Reports on Surgical Cases. Weller Van Hook.
9.— Case of Aortic Aneurysm. O. T. Freer.
10.— Cystic Kidney. W. F. Dickson.

Archives of Ophthalmology (N. Y), March.

11.—*Pathology of Amblyopia Following Profuse Hemorrhage and of that Following Ingestion of Methyl Alcohol, with Remarks on the Pathogenesis of Optic-Nerve Atrophy in General. Ward A. Holden.
12.—*Introduction of Iodoform into the Anterior Chamber of the Eye in Tubercular Iritis. N. J. Weill.
13.— A Case of Melanosarcoma of the Choroid. Matthias Lanckton Foster.
14.—*Electromagnets for Use with the 110-Volt Direct-Current Lighting Circuit. A. B. Kibbe.
15.—Clinic Contributions. Kaspar Pischel.
16.— Clinic Observations on a Case of Partial Incomplete Coloboma of the Iris. Arthur Gleor.
17.— Two Cases of Iridotomy Under Discouraging Conditions. F. M. Wilson.
18.— Clinic Experience with Haab's Powerful Electromagnet. Herman Knapp.
19.— Restoration of Conjunctival Cul-de-Sac in a Case of Total Symblepharon, by Means of Thiersch Skin Grafts. Charles H. May.
20.— Law of Listing and Some Disputed Points about its Proof. Carl Weiland.

Alienist and Neurologist (St. Louis), April.

21.— Outline of Psychiatry in Clinic Lectures. C. Wernecke.
22.—*Insanity Defined on the Basis of Disease. C. H. Hughes.
23.— Degeneracy Stigmata as a Basis of Morbid Suspicion. J. G. Kiernan.
24.— Imbecility and the Insanity of Imbecility Before the Law. C. H. Hughes.
25.— Case of Bilateral Athetosis, with Some Unusual Symptoms. Given Campbell.
26.— Syphilis and Insanity. Edoardo Collotti.

Annals of Otology, Rhinology and Laryngology (St. Louis), February.

27.—*Remarkable Case of Plastic Operation on the Face; Formation of Eyelids and Total Restoration of Nose. Carl Beck.
28.—*Trachoma of the Conjunctiva and its Relation to Diseases of the Nose. Dr. Zeim.
29.—*Nasal Insufficiency Due to Exaggerated Prominence of Anterior Arch of Cervical Vertebræ. James E. Newcomb.
30.— Delusional Insanity Resulting from Auditory Concussion. L. R Culbertson.
31.— Bilateral Aural Lesion Following Traumatism. James F. McCaw.
32.— Treatment of Uncomplicated Suppuration of the Middle Ear. H. A. Alderson.

New Orleans Medical and Surgical Journal, May.

33.— Signs and Tests of Death. Justin Herold.

Peoria Medical Journal, April.

34.— Erysipelas-Phlegmonous. J. W. Hensley.
35.—*Myxedema. F. C. Robinson.
36.— The Doctor as a Collector. J. E. Coleman.

Southern California Practitioner (Los Angeles), April.

37.—*Management of Pulmonary Hemorrhage. Norman Bridge.
38.—*Intubation of the Larynx. B. F. Church.
39.—*The Pineal Gland or the Third Eye. B. M. Davis.
40.— Intestinal Obstruction. J. B. Murphy.
41.— Hypertrophy of the Pharyngeal Tonsil and its Relation to Ear Troubles. H. Bert Ellis.
42.— Nutmeg Poisoning. Walter Lindley.

Medicine (Detroit), May.

43.—*Ignaz Philip Semmelweis, Discoverer of Cause of Childbed Fever.
44.—*Contagiousness of Puerperal Fever as Set Forth in an Essay by Oliver Wendell Holmes.
45.—*Contagion and Infection in Nervous and Mental Diseases and Degeneracy, and Measures of Prevention. Richard Dewey.
46.—*A Late form of Gonorrheal Cystitis in the Female. Gustav Kolischer.
47.—*Etiology, Prevalence and Treatment of Hysteria. U. O. B. Wingate.
48.— Border-Line of Insanity. James C. Patterson.

Archives of Pediatrics (N. Y.), May.

49.— Meningitic Typhoid Fever; Acute Yellow Atrophy of the Liver; Two Cases of Thigh Friction in Infants. J. P. Crozer Griffith.
50.—*Recent Advances in Surgery of the Skull. Seneca D. Powell.
51.—*Report of Twenty-five Cases of Laryngeal Diphtheria Treated by Antitoxin and Intubation. Theodore J. Elterich.
52.—*Successful Treatment of Chorea with Trional and Sulphonal. J. Howe Adams.

Medical Mirror (St. Louis), April.

53.—*Arteriosclerosis. James T. Whittaker.
54.—*Syphilitic Chancre of the Conjunctiva. Flavel B. Tiffany.

Fort Wayne Medical Journal-Magazine, April 1.

55.— The Revival of the Dead. William P. Whery.

St. Louis Medical and Surgical Journal, May.

56.—*Toxicity of Tobacco and a Method of Eradicating It. Heinrich Stern.
57.—*Odorless Iodoform. A. H. Ohman-Dumesnil.
58.—*A New Operation for Hernia. Emory Lanphear.

St. Paul Medical Journal, May.

59.—*Fistula Colli Congenita. J. Collins Warren.
60.—*Nephrectomy for Renal Tuberculosis, with Report of a Case. Edward Reynolds.

Canadian Journal of Medicine and Surgery (Toronto), May.

61.—*Clinical Report on Three Cases of Unusual Interest. Thomas H. Manley.
62.—*Remarks on the Treatment of Clubfoot, based on the Personal Experience of Three Hundred Cases. B. E. McKenzie.
63.— Correlation of Insanity and Crime. Ezra Hurlburt Stafford.

Hot Springs Medical Journal, April.

64.—*Treatment of Syphilis. R. R. Campbell.
65.—*Seven One-Minute Points on Syphilis of the Nervous System. Hugh T. Patrick.

Tri-State Medical Journal and Practitioner (St. Louis), April.

66.— Great Bells of Edinburgh. Joseph Bell.
67.—*Toxicologic Chemistry in Gastric Diseases. John Zahorsky.
68.— Pediculosis. A. H. Ohman-Dumesnil.

Western Clinical Recorder (Chicago), March.

69.—*Acute Articular Rheumatism. Arthur R. Edwards.
70.—*A Case of Interstitial Tubal Pregnancy, Operated in the Fifth Month Before the Occurrence of Rupture. O. G. Pfaff.
71.—*Treatment of Acute Endocarditis by Sulphuretted Saline Baths. E. Arman Fletcher.
72.—*Surgery of the Kidney. Bayard Holmes.
73.—*Weather Affections. W. Stuart Leech.

Southern Practitioner (Nashville, Tenn.), May.

74.—*Immunity and Susceptibility. I. A. McSwain.
75.— Chronic Gastritis. W. C. Bilbrow.

Medical Register (Richmond, Va.), April 15.

76.—*A Consideration of Tuberculosis and Lateral Curvature of the Spine, with Reference to the Treatment and Ancient and Modern Spinal Support. A. M. Phelps.
77.—*Oxaluria—Its Clinic Significance. Robert F. Williams.

Texas Medical News (Austin), April.

78.—*Intermittent Fever. A. Schirman.
79.—*Report on Balantidia Coli (Intestinal Infusorium). A. Schirman.

Toledo Medical and Surgical Reporter, May.

80.—*Examination of the Eyes of School Children. B. L. Milliken.
81.—*Hypodermic Treatment of Pulmonary Tuberculosis, with Clinic Reports. Charles Wilson Ingraham.
82.—*Creosote in Phthisis Pulmonalis. L. H. Warner.

New Yorker Medicinische Monatschrift, April.

83.—*Syphilis und Gesichtslähmung. Joseph Fraenkel.

Medical Herald (St Joseph), April.

84.—*Ventral Hernia Following Operations, and Its Prevention. E. E. Montgomery.
85.—*A Clinical Report of Cases of Abscess of the Liver. Edwin Frazer Wilson.
86.— Report of Regular Surgical Clinic at the Augustana Hospital, Chicago. A. J. Ochsner.
87.— Address to the Graduating Class of the Ensworth Medical College of St. Joseph. W. J. Bell.
88.— Some Causes that Contribute to Failure in the Treatment of Nasal Catarrh. John A. Hale.

Pediatrics (N. Y.), May.

89.—*Pathogenesis of Gastro-enteric Disease in Infants. John Zahorsky.
90.— Infant Feeding. A. W. Kratzsch.
91.— Colic. Philip F. Barbour.
92.—*Note on Epidemic of Malignant Scarlet Fever Occurring at Clearfield, Pa. S. D. Bailey.

Medical Age (Detroit), April 25.

93.— An Address to Graduates. Donald Maclean.
94.— Operation for the Correction of a Rectocele, a Cystocele, Displaced Uterus and Lacerated Cervix. Barton Cooke Hirst.
95.—*Antiseptic Treatment of Typhoid Fever. A. G. Ellis.
96.— Mydriatics and Myotics in General Practice. J. A. L. Bradfield.

Maryland Medical Journal, May 6.

97.— Radical Treatment of Chronic Suppurative Otitis Media. H. O Reik.
98.— Gelsemium Semper-virens. Noble P. Barnes.

Cincinnati Lancet-Clinic, May 6.

99.— Tubercular Annotations. H. H. Spiers.
100.— Apples for Constipation. Geo. J. Monroe.

Medical Record (N. Y.), May 6.

101.—*Some of the Objections to the Neuron Theory. Stewart Paton.
102.—*The Third Hitherto Undecided Disease of the Ovary: Myxomatous Degeneration. Mary A. Dixon Jones.
103.—*Intussusception in an Infant Nine Months Old: High Rectal Injection: Recovery. W. P. Northrup.
104.—*Appendicitis or Salpingitis with Complications and a Report of Some Unusual Cases. Thomas H. Hawkins.

Boston Medical and Surgical Journal, May 4.

105.—*Abuse of Medical Charity: The Passing of the "Charity" Hospital and Its Dispensary. Agnes C. Vietor.
106.—*Cases of Dislocation of the Os Magnum. Samuel L. Abbott.
107.—*Inversion of the Uterus. H. E. Marion.

Medical Review (St. Louis), May 6.

108.—*Therapeutic Value of Soluble Silver. John Zahorsky.
109.— Capsulo-tenectomy. Frank W. Hilscher.

Medical News, May 6.

110.—*On the Use of Antistreptococcic Serum in Infection by Streptococcus. A. T. Bristow.
111.—*Unusual Localizations of Tuberculosis. Aldred Scott Warthin.
112.— Eclampsia from the Surgical Standpoint. George L. Broadhead.

New York Medical Journal, May 6.

113.— Report of a Case of Removal of the Gasserian Ganglion with the Second and Third Divisions of the Fifth Nerve, Hartley-Krause Operation. John F. Erdmann.
114.—*Gastrodiaphany in the Infant. Henry Koplik.
115.—*Treatment of Syphilis. Boleslaw Lapowski.

116.—Prevention of Hay-Fever. Edward W. Wright.
117.—*Gold in the Treatment of Anemia and Malnutrition. J. P. Sheridan.
118.—*Position in Sleep. A Principle in Neurologic Therapy. Wm. Browning.

Philadelphia Medical Journal, May 6.

119.—*Malaria with Typhoid Fever. J. M. Da Costa.
120.—*Two Cases of Morbus Hemorrhagicus Nervosus. William Pepper and Alonzo E. Taylor.
121.—Report on the Condition of the Second Army Corps, From Sept. 29, 1898, to March 17, 1899.
122.—Acute Inflammation of the Tympanic Cavity. S. McCuen Smith.
123.—*On a Source of Danger to Röntgen Ray Experimenters. M. I. Wilbert.
124.—*New Test for Morphin. A. M. Kotzebue.
125.—Hat Pin in Male Bladder. Herman B. Sheffield.

1.—See abstract in JOURNAL, March 25, p. 661.

2.—This paper was printed in full in the JOURNAL, April 25, p. 802.

3.—See abstract in JOURNAL, March 11, p. 543.

4.—Ibid, p. 544.

5.—Ibid, 543.

6.—Ibid.

7.—Ibid, p. 544.

8.—Ibid.

11.—**Amblyopia from Hemorrhage.**—Holden has experimentally investigated the blindness observed after profuse hemorrhage, which has been accounted for variously. He operated on two healthy dogs and later examined the eyes microscopically. The pathologic conditions were edema of the nerve-fibers and ganglion-cell layers of the retina, and some ganglion cells beginning to show signs of degeneration. This will explain the ordinary cases of amblyopia following hemorrhage. In those unusual ones in which the sight disturbance takes the form of a central scotoma, while the ophthalmoscopic changes indicate retrobulbar neuritis, some special explanation is required which can not be given except after pathologic investigation of each particular case. He also investigated the suddenly developing amblyopia which has been observed after ingestion of methyl alcohol, and finds that it comes under the same catagory, as due to the nutritive disturbances in the ganglion cells of the retina.

12.—**Iodoform in Anterior Chambers of Eye.**—Weill has experimented in the University Eye Clinic at Zurich on the effects of the introduction of iodoform into the anterior chamber, and he finds from his clinic observations and histologic examinations, that sterilized iodoform is slowly absorbed in the anterior chamber even if the boundaries of the same are diseased; that it undoubtedly exercises a mitigating influence in tuberculosis, and that it may bring about a temporary retardation of tubercular invasion and afford sufficient time to build up the general system to better resist the infection; its use does not preclude other remedies, but on the contrary, needs them as adjuncts, and it is applicable in both chronic and acute cases.

14.—**Electromagnets.**—Kibbe describes a magnet which he has devised as a substitute for the Haab magnet as less cumbersome and expensive and more convenient.

22.—**Insanity Defined.**—Hughes reviews some of the attempts to produce a satisfactory definition of insanity and offers the following as his contribution to the total. He says: "We need never be at sea before any court, before any jurist, in giving our views of insanity as *a disease primarily or secondarily involving the brain of the individual so as to produce in him a change in the natural habits of thought, feeling or action—a change of his normal, natural mental expression by which, and by reason of the disease underlying all, he is placed out of harmony with his surroundings, with his natural self or with his normal family type of mind.*

27.—**Plastic Operation.**—Beck reports a remarkable case of plastic surgery in a girl of 14 years, suffering from inherited syphilis, in which there was total destruction of the nose, including the bony septum, both lower eyelids and the central portion of the palate. Persistent treatment relieved the acute symptoms of the disease, and after a failure to remedy the condition by operation, she came into Dr. Beck's hands. The first stage was the removal of the diseased right conjunctiva and transplantation of a graft of the oral mucosa into the wound; this succeeded only partially. The left lower eyelid was then restored by a tongue-shaped flap dissected from the left temple with success. Next the whole scar on the right cheek was excised and the same kind of flap taken from the right temple inserted to restore the removed tissue and form the right eyelid. The formation of a nose was accomplished by two flaps from the cheeks, forming its inner lining, and a triangular flap from the forehead, turned down and cut off afterward at its base. Unfortunately a little portion of this flap died out and a small opening remains at the root of the nose. An attempt was made to close this by bringing the tissue nearer together, but without success. Each stage of this operation is illustrated. The case is an interesting one and its success, though not complete, is, in its way, a triumph for surgery. The girl has rallied from the operations and it is hoped that there may be some future minor improvements which will perfectly restore her face.

28.—**Trachoma.**—Ziem, discussing the causation of trachoma, holds some views on climatic or telluric conditions, such as excessive heat and sunshine; dust and vapor, directly affecting the eye; mold, in malarial districts especially; swamp air, affecting the whole respiratory system through the nose, the conjunctiva becoming affected either by continuity or vascular connection; and by means of some agent entering the digestive tract, possibly in the drinking water, so that it is carried to the eye through the circulation. Each of these causes is discussed separately. He thinks that the intimate connection between trachoma and nasal catarrh is established, and this explains certain peculiarities in its manifestation better than other theories. These views affect his treatment of the disease, and he has made it rather dietetic and hygienic, even when local scarification is carried on. He believes that much can be done by proper measures of public hygiene, drainage, ventilation, foresting, etc.

29.—**Nasal Insufficency from Bony Prominences.**—Newcomb calls attention to the fact that in some cases, as shown by Mendel and others, there may be serious nasal obstructions due primarily to bony prominences in the rhinopharynx, generally accompanied by adenoids. He believes that in this case it is advisable to remove the adenoids, but without encouraging a too hopeful feeling as to the results. Usually as the patient grows older the projection becomes proportionately less in size and may cease to give any trouble.

35.—**Myxedema.**—Robinson reports a case of typic myxedema in a woman aged 52, the first symptom dating back about ten years. Iodid of potassium relieved some of the symptoms, but under thyroid there was very decided improvement. Death occurred from intercurrent trouble, diagnosed as gall-stone and treated by an "irregular," with morphin injection.

37.—**Pulmonary Hemorrhage.**—Bridge discusses the subject of hemoptysis and its treatment. He objects to the usual methods of giving ergot, salt, etc., and thinks that morphin, preferably with atropin, hypodermically, is the best remedy. The patient should be kept quiet and in a recumbent position. Ice on the chest has no special value.

38.—**Intubation of Larynx.**—Church discusses the methods of intubation and the indications for its use. He believes that it should not be delayed too long or until the severe symptoms appear.

39.—**Pineal Gland.**—Davis touches up a bit of popular science, namely, the statement that has gone about in the papers, that man once possessed a third eye, by means of which he was able to see above his head. He describes the anatomy of the pineal gland, its development in the various orders of life, and shows that, in mammals at least, it is simply the rudiment of a primitive organ that is now useless, like the vermiform appendix and some others. The old theory that the pineal gland was the seat of the soul would require the belief that the soul had its greatest development, or at least required the most space, in the lower animals and in the early periods of embryonic development. Very few conclusions are warranted as regards the pineal gland. Its prominence in all forms of animals would indicate that it must have been once of some importance. Its early appearance and rapid development rather indicate that it is very primitive and has long since become rudimentary. The presence of nerve-fibers and their subsequent disappearance, and a few indications of its having been an eye like organ, suggest that it was originally some kind of a sense organ and probably one affected by light. What its present function is, it is hard to say.

43 and 44.—**Puerperal Fever.**—With the historic sketch of Semmelweis is also noticed the well-known paper by Dr. Oliver Wendell Holmes, which antedated any publication by the German physician and which calls attention as emphatically to the contagious nature of puerperal fever. The difference between Holmes' paper and that of Semmelweis is that one was distinctly polemic and from clinic observations only, while the latter based his theories on experiments. The author of the sketch here given does not admit that Holmes made any discovery at all and, therefore, the question of priority between Holmes and Semmelweis need not be raised. [Holmes, however, has the distinction of having first called public attention to the danger, and it really matters little whether he verified his conclusions by logic deductions or by experiments. We are a little apt in science to overvalue physical experiments.—ED.]

45.—**Nervous and Mental Diseases.**—Dewey's paper calls atten-

tion to the facts of mental contagion and degeneracy. He does not value the legal remedies that have been proposed, the regulation of marriage, etc. The danger is mostly in those cases that are not pronounced degenerate, but are near the normal line. We have no reason to despair because we, observing more closely, see more degeneracy and insanity at the present time.

46.—Gonorrheal Cystitis.—Kolischer remarks on the symptoms and appearances in cases of gonorrheal inflammation of the vesical mucosa. These cases are not easily treated by the ordinary methods of washing out the bladder or even by the instillation of strong solutions of nitrate of silver. The method he adopts is to fill the bladder with water, then introduce a sharp curette through the operative cystoscope, scraping the membrane and curetting the ulcerated surface. After this the bladder is washed. With proper after-treatment (careful instillation of nitrate of silver), a cure is usually easily affected. In obstinate cases it may be necessary to use the nitrate of silver pencil or galvanocautery. He cautions against the use of cocain, as the bladder thus treated sometimes absorbs very rapidly, and suggests the use of morphin suppositories if necessary, or even general anesthesia. This treatment, he claims, is uniformly successful and removes a constant source of danger, the secondary infection of the ureters and kidneys.

47.—Hysteria.—Wingate describes some of the symptoms of hysteria and gives his ideas as to its treatment, which must be largely of a prophylactic nature. He suggests that the question may be raised as to whether, considering the marked heredity in these cases, marriage should be prohibited. He thinks that in many cases the famous advice of Punch (he has it Puck) should be followed. The problem of treatment is restoration of function of the nerves and is best brought about by a complete change of surroundings and building up the system in every possible way. He condemns the use of hypnotism, it being a sort of induced hysteria itself. He gives details as to special symptoms.

50.—Surgery of the Skull.—Powell describes the dangers of concussion of the brain from the gouging or biting instruments, and his own appliances and technic. His electric saw and its management are illustrated by half-tone cuts.

51.—Diphtheria Antitoxin.—Elterich briefly reports twenty-five cases of laryngeal diphtheria treated with antitoxin, twenty-one of which were also intubated. There were five deaths, all of cases complicated with heart failure, pneumonia or sepsis, a ratio of 20 per cent., which, considering the class of cases, may be considered very favorable. Antitoxin was injected in three cases on the first day, three on the second, nine on the third, five on the fourth, three on the fifth and two on the seventh. The tube was worn two and a half days on the average. Antitoxin should be used as early as possible, and, if so, may often avoid the need of intubation. This ought not be delayed too long. Restlessness and constant dyspnea are indications for its performance. The tube should be allowed to remain in the throat till the diphtheritic membrane has disappeared and expectoration has become thin and viscid.

52.—Treatment of Chorea.—Adams discusses the treatment of chorea by various drugs, and mentions a case of his own in which great improvement followed the giving of trional in two-grain doses every four hours. He has tried it since in other cases with equally good results. In his opinion trional and sulphonal thus administered are next to arsenic in the treatment of this disease.

53.—Arteriosclerosis.—Whittaker's article is a comprehensive one, covering the whole subject of the nature, etiology, symptoms and treatment of atheromatous arterial disease. Age, syphilis and alcohol are, in his opinion, its most active causes, but many other elements enter into its etiology, and all of these are to be considered in its prophylaxis and treatment. The ability to adjust work to the changes of advancing life, regulation of diet, oxygen in the way of fresh air and outdoor life, drugs, baths and exercise judiciously used to relieve the overtaxed vessels and heart, and mental exercise to keep the faculties in practice are all of use. That there are more rust out than wear out, as Grant said of horses, is true of men also.

54.—Chancre of Conjunctiva.—Tiffany gives the general facts as to syphilitic chancre of the eye, and briefly reports two cases that came under his personal care. One of them is illustrated.

56.—Tobacco.—Stern describes the toxic action of tobacco and details a method suggested by Gerold of Halle to prevent the injurious action of the tobacco elements. He uses a decoction of 15 grams of tannic acid, boiled with 1.5 kilograms of water until the weight is reduced to 1 kilogram, and 30 grams of the essential oil of origanum are added. The mixture is then filtered and cooled to 16 C., when it is spread over 8 kilograms of tobacco leaves, which are then subjected to slight pressure and moderate heat. Stern has found tobacco thus treated to be comparatively innocuous in its effects.

57.—Odorless Iodoform.—Ohmann-Dumesnil recommends the odorless iodoform (Johnson), the difference of which from the ordinary iodoform is in the absence of hydrogen. Besides being non-irritating as well as non-offensive, it possesses all the good qualities of ordinary iodoform in a still higher degree.

58.—Hernia.—Lanphear suggests a new operation for hernia in which he first lifts out the spermatic cord and testicle from their natural position and places them in an artificial sac made from the hernial sac, enclosed with catgut sutures in such a way as to prevent too much pressure on the cord, and pushes the whole into the abdominal cavity. He then completely obliterates the canal as is done in operation for inguinal hernia in the female. The possibility of atrophy of the organs thus treated, he admits, but he has also seen it follow after Bassini's operation. The possibility of a suppurative orchitis or epididymitis was thought of, but the rarity of such inflammation of these structures is such that the danger can scarcely outweigh the advantage gained. Thus far he has had only the best results with this operation.

59.—Fistula Colli Congenita.—Warren describes an interesting case of congenital fistula or branchial cleft of the neck, which was treated by extirpation. The tube was extremely elastic and appeared in length and caliber not unlike the appendix veriformis. Its upper end was closed. There was very little difficulty in its removal and the author suggests that in other cases radical extirpation is to be preferred to the more common method of producing irritating inflammation in the effort to obliterate the canal.

60.—Renal Tuberculosis.—Reynolds reports a case of nephrectomy in a woman 44 years old, in which the left kidney was removed successfully. He thinks that, while the case is not an exceptional one, being one of three in his experience, he finds so much skepticism in regard to the unilateral character of renal tuberculosis that he thinks every carefully observed case that has done well after operation for a sufficient length of time should be reported. He believes, in regard to the diagnosis, that the examination of all cases of urinary disease in women should consist of, besides the history, a careful digital and bimanual palpation of the kidneys and the abdominal portion of the ureters, of the genital organs and of the bladder and vesical ends of the ureters (per vaginam), also a cystoscopic examination of the bladder, preferably in the knee-chest position. If any inflammatory condition of the mucous membrane is found, that must first be disposed of, but if none is present, the whole bladder should be examined carefully, special attention being given to the trigonum; each ureter should be catheterized and the resulting specimen submitted to an expert. If pus is found in the sediment from either, it is well to use an inoculation test on guinea pigs. The existence of pus in the ureteral urine means calculus, tuberculosis or simple pyelonephritis. Stone may possibly be detected by the sound or by a skiagraph, though these are not absolutely certain. Tuberculosis, if the tubercle bacilli are not detected, may be proved by inoculation experiments. Simple pyelonephritis must be diagnosed by the exclusion of the other conditions.

61.—Dermoid of Scrotum, etc.—Manley reports a case of an enormous dermoid of the scrotum in a man aged 60, that had developed since his 53d year. The tumor measured 28 inches over its antero-posterior diameter and 24 inches over the lateral. On operation the usual contents of a dermoid were found: hair, calcareous matter, etc. Recovery. He also reports two cases of umbilic hernia, one in an old woman, and one (congenital) in a newborn female infant, which contained all the principal abdominal viscera.

62.—Clubfoot.—McKenzie furnishes an illustrated paper on clubfoot. He concludes, on the basis of the cases observed by him, that the prognosis is good in ordinary non-paralytic cases, that in children restoration to the normal in form should be possible and approximately so as to function; that restrictive methods by dressings or apparatus should be as little used as possible. Persistent manipulation is useful. Operative treatment should be thorough, leaving no deformity, and intelligent and persistent after-treatment is an essential. Age is no bar to treatment. The prognosis in paralytic cases will vary with the nature and degree of the paralysis.

64.—See ¶ 6, p. 1045.

65.—See ¶ 7, p. 1045.

67.—Gastric Toxins.—Zahorsky reviews the subject of the gastric poisons, more especially those of animal origin, leucomains and ptomains. Other chemic poisons, such as acids, proteoses,

glycerids, etc., have their origin, physiologic or pathologic, in the organism, and should be considered. The excretion of leucomains by the gastric mucosa is a matter for more careful study than it has received, and it is probable that many gastric irritations are due to this cause, and evidence that gastric ulcer may be originated in this way is accumulating. Bacterial poisons, endogenic and ectogenic are important, and in this connection Zahorsky mentions tyrotoxins and butilotoxins, the endogenic bacterial products pointed out by Bouchard, etc. Tetany has also been attributed to poisons generated in gastric dilatation. The general subject of gastric toxicologic chemistry is assuming immense proportions and has only begun to be studied.

69.—See abstract in JOURNAL, February 11, p. 305.

70.—**Tubal Pregnancy.**—Pfaff reports and illustrates a rare case of interstitial tubal pregnancy extracted successfully in the fifth month, before rupture. He remarks that Lawson Tait, with all his experience, had seen but one similar case, and claims that his specimen has the distinction of being the only one not secured post-mortem.

71.—**Sulphur Baths in Endocarditis.**—Fletcher reports two cases of acute endocarditis, resisting other treatment, cured by baths at a sulphur spring sanitarium. He says he used the word "cured" advisedly.

72.—**Surgery of Kidneys.**—Holmes discusses the surgery of the kidneys, injuries, hydronephrosis, pyonephrosis, abscess, tuberculosis and tumors. He illustrates each condition with brief statements of cases, and reports, slightly more in detail, two cases of adrenal tumor. The surgery of the kidney has advanced more than that of most organs within the past two years, and its surgical disorders have been more recognized. In all pathologic conditions with the existence of one healthy kidney, operative treatment is possible. Pyonephrosis, partial cystic degeneration, and stone no longer require nephrectomy, which is left for such conditions as carcinoma, sarcoma, tuberculosis, and irreparable injuries of the ureter.

73.—**Weather Affections.**—Leech objects to the common diagnosis of la grippe for so many of the common disorders dependent on weather changes. He calls them dengue, and says that this makes up fully 90 per cent. of the cases thus diagnosed. He reports five cases.

74.—**Immunity.**—McSwain's paper treats of immunity, the normal resistance of the healthy organism, which may be embarrassed or impaired by heredity, or can be destroyed or injured by various disturbing influences, such as alcohol, acute disease, climate, habit, etc. There is also an acquired immunity due to habitude, and that produced artificially. The duty of the physician is: 1, to maintain the normal immunity by hygiene, sanitation and preventive medication; 2, to restore lost immunity by building up the systemic resistance and destroying or counteracting the infections. The future of scientific medicine, McSwain sees in organotherapy: we must first accurately diagnose the infection, and then discover and utilize the antitoxin.

76.—**Tuberculosis and Lateral Curvature.**—Phelps reviews the history of the treatment of Pott's disease of the spine and illustrates it with many cuts. The diagnosis and symptoms are described. The condition is usually a curable one for the time, and if the child outgrows the strumous predisposition, recovery may be permanent. The treatment is described in detail, with illustrations of apparatus.

77.—**Oxaluria.**—Williams reports three cases of oxaluria and concludes that the appearance of oxalates in the urine, aside from the ingestion in food, is indicative of a derangement of digestion or metabolism, caused in many cases by functional nervous irregularities that may or may not cause general nervous symptoms. If these are present it is not certain that they are due to the oxaluria. The condition producing the latter may simulate Bright's disease, as in two of the cases reported. The renal excretion of oxalates, too, may, if continued, cause irritation producing albumin and casts with lessened urine, and if unchecked may lead to kidney disorders, in time to Bright's disease. In all suspicious cases of apparent Bright's disease with oxaluria, the diagnosis should be reserved until this symptom has been treated and results observed.

78.—**Intermittent Fever.**—Schirman reports three cases in which he inoculated healthy individuals with substance taken from the herpes in a subject of malaria and produced the disease. He claims that it may be accidentally transferred from one individual to another, as cases have occurred from sleeping with a patient during the sweating period of the attacks. As substitutes for quinin, he says, the following domestic remedies have been of service in his hands: convallaria majalis, helianthus annuus (sun-flowers) in infusion of the dried stem, 1 part to 8 of water, a tablespoonful three times a day, and syringia vulgaris (common lilac) in infusion of the fresh leaves (four to six in a teacupful of water, one or two cups a day taken). All these are easily obtained and can be easily prepared when needed, and have given him satisfactory and positive results.

79.—**Balantidia Coli.**—Schirman gives a report of a paper by Professor Degis of St. Petersburg on balantidia coli, a ciliated infusorium, as a cause of diarrhea, intestinal ulceration and sometimes of death. The organism apparently originates in swine and is swallowed or inhaled by men. The treatment should be directed to the conditions of the intestines; bismuth and tannalbin are recommended.

80.—**Eyes of School Children.**—Milliken pleads for the utilization of the oral method of teaching to a larger extent than is now practiced, especially in the earlier years of school life. The greater use of the blackboard with lectures, thus avoiding close eye application, would prevent much mischief in the future life of the pupils who suffer from any degree of ocular defect. He insists on the need of the earliest possible discovery of any existing ocular weakness in school children.

81.—**Tuberculosis.**—Ingraham's paper is a recommendation of bromin-iodin comp., a preparation claimed to be a chemic union of bromin ($\frac{1}{4}$ gr.), iodin (1 gr.), phosphorus ($\frac{1}{100}$ gr.), thymol ($\frac{2}{3}$ gr.), in one fluid dram sterilized oil. He reports cases treated.

82.—Warner reports two cases of tuberculosis treated with creosote, two minims, guaiacol, one minim, in liquid peptonoids, 1 to 2 tablespoonfuls every four hours, with great improvement.

83.—**Lues and Facial Paralysis.**—J. Fraenkel reviews the opinions of authorities on the question of the association of syphilis and facial paralysis, and reports two cases which would seem to support the view, not universally held, that facial palsy may be an early syphilitic manifestation. In the first case specific disease was unsuspected until the patient asked as to the possible causal relation of a suspicious intraurethral abscess following exposure $2\frac{1}{2}$ months before. In both cases specific treatment was followed by a remarkably rapid cure. Fraenkel considers these cases not altogether conclusive as to cause and effect, but rather suggestive. In any case it is a good rule in every instance of facial paralysis in young individuals, to keep the possibility of syphilis in mind, and to make careful search for any traces or history of the disease, in order to have the benefit of such knowledge in the treatment.

84.—**Ventral Hernia after Operation.**—Montgomery believes that this is often unavoidable, the general poor health of the patient hindering recuperation, or the requirement of drainage or vomiting after the operation may favor its occurrence. For its prevention he has been employing a figure of-eight stitch passing through the aponeurosis of one side, then up and through those of the other, then crossing the wound and emerging on the side it first entered. The other end is then threaded and passed up through the skin of the other side. This stitch crosses in front of the aponeurosis and brings the edges accurately together, while a second portion holds the skin and fascia. If tied properly it gives good results. A mistake is sometimes made in taking out the stitches too soon. They should remain at least eight days, and in weak or debilitated patients and those who have nausea and vomiting after operation they should remain still longer.

85.—**Liver Abscess.**—Wilson reports three cases of abscess of the liver, two of them confirmed by autopsy, occurring in Columbus, Ohio. In only one case had there been a history of antecedent dysentery, but in another the autopsy showed scars of healed ulcers in the large intestine. In this case also ameba coli were found in the stools and the pus. He thinks that tropic liver abscess is either more common in Ohio than has been supposed or that he has had more than his share of cases.

89.—**Gastro-Enteric Diseases in Infants.**—Zahorsky discusses the subject of toxins in the economy, their nature, physiologic action, and origin, and their relation to the gastro-intestinal lesions of infancy. Their greatest source is from bacteria, and they may be ectogenic or endogenic. The great majority of the severer forms of enteric disease, however, are due to endogenic intoxication. Too much stress has been laid on infection from milk; there are abundant other sources of infection; uncleanliness of surroundings is as, or more, frequently the source. Intestinal putrefaction processes due to the colon bacillus and other inhabitants of the bowel is the cause of the majority of cases of enterocolitis. It can be controlled by dieting to some extent, but a true infection of the intestinal wall tends to run a more or less definite course when the tendency to spontaneous recovery is present. The prognosis of

putrefaction irritation depends on the destruction of intestinal cells.

92.—**Malignant Scarlatina.**—Bailey gives a history of an epidemic of malignant scarlatina, with a mortality of 40 or 50 per cent. originating in an old tenement where scarlet fever had occurred and disinfection was neglected. There were 200 to 300 cases in all, starting from this, some of them fatal within a few hours. The invasion stage was particularly severe and many who survived it died later from septic infection, etc. In this later stage much good was derived from constant applications of lead water and laudanum in inflammatory conditions of the throat and neck, and Bailey thinks this a most important part of the treatment. The other remedies that gave the best results were hot mustard foot baths, cold and tepid sponging to the head, sedatives, diuretics, diaphoretics combined with gradual stimulation when needed, and antiseptic unguents. Drugs were only used when positively indicated; in the early stage, tincture of aconite root, citrate of potassium, acetate of ammonia, and chloral, as the symptoms demanded. Salicylic acid in small, often repeated doses was useful, and, he thinks, prevents complications. In very few of the recovered cases were there bad sequelæ.

95.—**Antiseptic Treatment of Typhoid.**—Ellis' paper is largely a quotation from an address by DaCosta, in which he praises the effects of certain drugs in typhoid, especially the double bimuriate of quinin and urea, and betanaphthol. The former was used hypodermically (amount not given). It is extremely soluble; its injection causes no pain and forms no abscesses. Da Costa believes it especially useful in mixed malarial and typhoid cases. Betanaphthol, DaCosta finds beneficial and the sign that it is doing its good work is its deodorizing the evacuations. It is less disturbing to the kidneys than salol, and he uses it almost as a routine treatment.

101.—**Objections to Neuron Theory.**—Paton reviews the questions that have been raised by Apathy, Bethe and others, as to the correctness of some of the more recently accepted views in regard to the finer structure of the nervous system, and also refers to the possible fallacy of staining methods on which these views have been based. He raises the question especially as to whether fibrils directly connect the cells with each other and with the intercellular substance, and believes that the assertion that the nervous system is made up of separate units or neurons and the structural and functional independence of the nerve cells, as assumed nowadays, is an untenable theory.

102.—**Myxomatous Degeneration of Ovary.**—This author discusses myxomatous degeneration of the ovaries, and in concluding her paper questions the correctness of the theory of the internal secretions of the organs, maintaining that the evils following their removal are due more to the loss of function and long-continued and extensive disease of the organs before their ablation rather than to any deficiency of special secretions in the system.

103.—**Intussusception.**—Northrup reports a case of intussusception in an infant nine months old, reduced by high rectal injection. He refers also to another similar case in a seven months' old child, reported by Dr. Neff. He believes from these and other similar experiences that in recent cases in intussusception moderate pressure (three to five feet) of warm water (105 to 108 degrees) prolonged to full distension is justifiable and advisable.

104.—**Appendicitis.**—Hawkins, in discussing appendicitis, favors the early operation and reports several peculiar cases where the diagnosis as to whether appendicitis or salpingitis existed was rather doubtful. He discusses the question whether appendicitis may not be complicated and infect the tube, and vice versa.

105.—**Abuse of Medical Charity.**—Vietor treats of the abuse of medical charity by hospitals and dispensaries and discusses the remedies, one of which seems to be sought in an extension of the provident system of the in- as well as of the out patients, requiring a fee in all hospital cases and allowing physicians to treat their own cases in such. At present the system of the charity hospital pauperizes the community and robs the medical profession of its earnings. The plea that they are required for teaching purposes is a poor one, as it necessitates the impoverishment of the person who receives the educational facilities.

106.—**Dislocation of Os Magnum.**—Abbot reports four cases of dislocation of the os magnum, and remarks that very little notice of these accidents is given in works of surgery. He finds the best treatment to be the use of Bond's splint, by which the bone drops into its place without any painful handling and remains there as long as may be required, without disabling the fingers or thumb or causing pain.

107.—**Inversion of Uterus.**—Marion reports two cases of inversion of the uterus which appeared in his practice in labor, and both of which were reduced immediately without mention of the accident and without affecting the recovery. He believes that it occurs much more frequently than is commonly reported, and that many cases reported due to post-partum hemorrhage are complicated with this condition.

108.—**Soluble Silver.**—Zahorsky discusses the question of the therapeutic value of silver in Credé's ointment, etc., and concludes that the value of the remedy is still somewhat in suspense and that while it certainly deserves a more extended trial it should not be relied on exclusively.

110.—**Marmorek's Serum.**—Bristow reports fourteen cases in which he has used antistreptococcic serum, and concludes that cases of cutaneous or so called idiopathic erysipelas may be quickly terminated by the early use of this preparation, the initial dose being 10 to 20 c.c., according to the severity of the case, followed by additional doses if necessary. More than two or three doses will rarely be required. In phlegmonous erysipelas it seems to prevent its extension, but has little effect on the sepsis already produced. As regards other diseases due to special germs, the Marmorek serum may be of value as regards complication by the streptococcus, but can hardly influence the original disease. As regards puerperal cases, the results he has obtained are not encouraging. He does not believe that any serious risk is run in introducing large quantities of the serum into the system, and thinks that it is better to give rather too much than too little, considering the fact that the serum has not yet been standardized as to strength. The average dose is 10 c.c., and 20 c.c. will often be required, while the daily quantity of 60 c.c. may be needed.

111.—**Tuberculosis.**—Warthin reports a number of rare localizations of tuberculosis in the system, including complication with sarcoma, carcinoma, primary tuberculosis of the mamma, nose, lobe of ear, heel, brain, Graafian follicles, placenta, Fallopian tube, and artificial anus. The last case he gives in detail.

114.—**Gastrodiaphany in the Infant.**—Koplik describes a new instrument by which he has succeeded in making examinations of the stomach in infants under one year old. The improvements introduced are mainly those guarding against possibility of accident by breakage, overheating, etc. He does not advise the use of this in children past twelve months, as the terror it would incur would defeat its object. He has employed it mostly in children below the age of six months, and considers one year the limit of its usefulness.

115.—**Treatment of Syphilis.**—Lapowski continues his article, noted in the JOURNAL, April 29. In one form of syphilis, the malignant stage, mercury should not be used in any form, while iodin is of great value. Iodid of potassium has been almost exclusively used, but it has been suggested recently to replace it by iodid of rubidium, which is more agreeable and easily administered. The mixed treatment of iodin and mercury is carried on most successfully by administering iodin for a certain period, say two or three weeks, and then after an interval of five or six days proceed with mercury, as the iodin will be eliminated by the time the mercury comes in contact with the internal tissues. Where kidney affections exist in syphilitic patients, it is advisable to place the patient under the influence of iodin and avoid the mercury. In late cases, where the cause of the kidney affections can be attributed to the syphilitic virus, mercury can also be used. The kidneys are to be especially investigated in pregnant women with the disease, and mercury to be absolutely excluded if they are found affected. Where the kidneys are healthy, in these cases, vigorous treatment by inunctions is advisable. Besides the main remedies of iodin and mercury in syphilis, other measures, mineral springs, hot and cold baths, are useful, and surgical treatment may even be employed in some cases, as in the secondary lesions of the bones. In any case hygiene is of the utmost importance, and the patient's general health must be carefully looked after, bodily and mental fatigue should be guarded against, as possible causes of late syphilis of the nervous system. As regards diet, caution should be used against anything that might excite diarrhea during mercurial treatment. In local treatment asepsis is a prime requisite, and all irritating preparations and methods should be avoided. The paper discusses the question of the possibility of a complete cure, and leaves the matter rather in doubt. Chronic intermittent methods of treatment should be avoided.

117.—**Gold in Anemia.**—This is a "write-up" for Mercauro.

118.—**Positions in Sleep.**—Browning classifies sleepers according as they have the head high or low during slumber. In the first division he includes the medium class, those who use simply an ordinary pillow. These are generally normal indi-

viduals and do not require further consideration. The second class are those who sleep with their heads high. In this category are found cases of excitement, mental overactivity, mania, also many who do not present any special nervous disturbances. The third class comprises those whose habits are to sleep with the head lower than the average, sometimes without either pillow or bolster. This class includes nearly all cases of mental and nervous depression, sufferers from melancholia, anemia, etc. The third type is the most important because most frequent in the sick, and the indications for remedy in their case are tonics and excitement. The second class, on the other hand, are the direct reverse, stimulants are not required, tonics and excitement are contraindicated.

119.—**Malaria and Typhoid.**—DaCosta reviews ten cases of malaria with typhoid fever responding to the Widal test, as well as showing microscopic evidence of the malarial organism in every case, either of the tertian or the estivo atumnal type. The cases may or may not have had malarial chills before the typhoid condition developed; the chills were peculiar in that they did not occur early in the fever malady; more often appearing exceedingly late in the disease, or with a relapse; only in one case was the malarial chill observed early in the course of the typhoid. A peculiarity of these mixed cases was that they were all of long duration, invariably passing beyond the fourth week; one protracted case was marked by the absence of chill and no abrupt alterations in temperature, but in this case the malarial organism was demonstrated by blood examination. Where the course of typhoid is characterized by great irregularity of temperature, with or without chills, by frequent relapses, or pursuing a protracted course, examination should invariably and persistently be made for the malarial corpuscles.

120.—**Morbus Hemorrhagicus Nervosus.**—The first case was that of a woman, aged 38, of decidedly nervous temperament and hysteric history, in which case the onset of the hemorrhages was uniformly characterized by vesical and systemic disturbances, sensations of extreme cold, headaches, decided mental depression and other prodromes; after twenty-four to thirty-six hours, burning, itching and pain was felt in the areas to be involved, deep subcutaneous mottling accompanied by severe pains gradually appearing, and the ecchymosis gradually fading. It was observed that the areas involved were always symmetric, the ankles, the inner aspect of the thighs, or perhaps the deltoid regions were at times the site of the hemorrhages. Hemoptysis, epistaxis, hematemesis were at times observed, but the visceral hemorrhages were curiously enough not preceded or accompanied by pain. Attacks in this case were precipitated by intense emotions of fright and anxiety. Constipation was persistent. Blood examination was practically negative. The second case was also a young woman, but presenting no hysteric manifestations—indeed, she was strong and perfectly healthy, excepting that persistent constipation had been present since childhood. The hemorrhagic condition was first observed in the sixth year. The recent attack in the twenty-fifth year began with a persistent swelling of both feet and ankles, pitting and of a deep red color persisting for months; then the purpuric phenomena appeared, followed by gradual diminution of the erythema nodosum. At various times visceral as well as subcutaneous and submucous hemorrhages have occurred. The stomach, kidneys, genital tract, mouth, nasal passages, and even the rectum were involved; arthritic symptoms and signs have never appeared; fever was often present; an ulcerative tonsillitis and stomatitis existed for five months, but this condition cleared up after the administration of thyroid extracts. Under the thyroid treatment the frequency and severity of the ecchymotic attacks were diminished, but such treatment entailed great loss of flesh. Prodromes were always present in this as in the previous case.

123.—**Danger to the Roentgen Ray Experimenter.**—Wilbert calls attention to the danger attending the continued inhalation of the irritating atmosphere so frequently observed in the close and poorly-ventilated X-ray laboratories. Ozone has great affinity for oxidizable gases. Electric currents of high tension being forced through the air heat nitrogen to or above its ignition point, when it will readily unite with ozone or oxygen present, forming the oxids of nitrogen, a mixture of which is is highly injurious when inhaled, producing the various respiratory irritations, and even chronic affections. In arranging such a laboratory, perfect ventilation is an important consideration.

124.—**New Test for Morphin.**—Kotzebue observed that if to a quantity of pure water morphin be added to the extent of making a solution of even one to one million, and then two drops of a 10 per cent. solution of phosphomolybdic acid introduced, an exceedingly delicate, hardly perceptible, yellowish-white precipitate will be formed as with all alkaloids. A half dram of strong ammonia c.p. added gives a decidedly blue solution, best seen by placing a graduate containing the solution on a sheet of white paper. Thallin behaves similarly, only the reaction in this case is more delicate, showing a blue color up to a dilution of almost one to two million. Any of the salts of thallin or morphin can be used for this reaction. Under similar conditions atropin, strychnin, quinin, quinidin, cocain, caffein, pilocarpin, hyoscin and cinchonidin fail to give anything like the same results.

FOREIGN.

Lancet (London), April 22.

On the Pulsus Paradoxus, with Special Reference to its Occasional Occurrence on One Side Only. THOMAS HARRIS.—The writer reports a case of so-called pulsus paradoxus, or that form of pulse which becomes small or imperceptible during the act of inspiration and which has been considered as symptomatic of indurative mediastino pericarditis, though incorrectly, as Harris shows. In his case the symptom was unilateral and he reports it in detail. The old explanation of the symptom, that it is due to adhesion between the anterior part of the chest wall and the aorta, causing a narrowing of the main arterial stem, is not satisfactory, and in Harris' case, while there were extensive adhesions, he is inclined to think that the phenomenon was probably caused by the greater length and narrowed lumen of the left subclavian artery as compared with that of the innominata and that adhesions in the mediastinum would have more effect on this narrow artery in the production of kinking of the vessel than would adhesions in the larger innominate artery. He does not insist, however, on this explanation, though it does seem probable to him. (See also JOURNAL, February 25, p. 443.)

Criticism of the More Commonly Employed Tests for Albumin in Urine. P. G. CAMMIDGE.—The author discusses and criticizes all the customary tests for albumin, and concludes that of all those so far introduced, salicylsulphonic acid seems to be most convenient and freest from objections. It is cleanly, fairly cheap and certain and may be carried around conveniently, and is applied to the urine direct, without heating or any special apparatus. By means of it all forms of albumin and most albumoses are precipitated at once, the latter being readily distinguished by their solubility on heating. It does not precipitate phosphates, urates, uric acid, bile, alkaloids or drugs, and works equally well with an alkaline or acid urine. The greatest objection to it is its precipitation of nucleoproteids, and its great delicacy, and the best check to these two possible fallacies is by the supplementary use of Heller's test in doubtful cases.

A Second Case in which Recurrent Mammary Cancer Disappeared after Treatment by Oophorectomy and Thyroid Extract. G. ERNEST HERMAN.—The author reported a case last year in which recurrent mammary cancer had disappeared after oöphorectomy and treatment with thyroid extract and he now reports that the patient is still well and has gained in weight. He also adds that the tumor was examined microscopically and its malignant nature determined. He now reports a second case similar to the first, in which both ovaries were removed on July 12, 1898, and she was put on thyroid extract, 5 grains three times daily, which she has continued to take ever since. The result seems quite as favorable as in the first case reported. He believes that the combination of the operation with the thyroid treatment is far more beneficial than either of them alone, and that this combination has gained results which have not been approached by any other treatment of recurrent mammary cancer. A cure can not be positive until all chance of relapse has passed, but it is a great thing, as he says, to make a cancer disappear without direct surgical treatment.

Bromid of Strontium in Epilepsy. ANTONY ROCHE.—The writer believes that bromid of strontium is especially effective in epilepsy. He generally gives it in an infusion of quassia, commencing with a dram a day, giving 40 grains at the most threatened period and 20 grains twelve hours after. If the fits recur with this dose he increases it to 1.5 drams, and so on, and he has frequently given as much as three drams a day without any more serious symptoms than a bromid rash, which is generally controlled by small doses of arsenic. He believes that if the patient finds no inconvenience from it except the rash, the bromid should be continued indefinitely. It is desirable in each case to find the smallest dose that is effective, and stick to that, also to see that the medicine is pure and no other bromid salt is substituted.

Australasian Medical Gazette (Sydney, N. S. W.), April.

Chronic Morphinism, Treated with Sodium Bromid. J. C. VERCO. This author reports a case of chronic morphinism treated with

sodium bromid in doses of 45 and 30 grains, aggregating as much, sometimes, as four drams in twenty-four hours. The patient was, of course, thoroughly brominized during the treatment, which lasted over ten days and required two weeks more to recover from it. The morphin habit, however, was broken off. A peculiar feature was the mental disturbance, delusions, hallucinations, etc., which existed for nine or ten days, but which in its inception, the author thinks, antedated the treatment, but was possibly aggravated by it.

Semaine Medicale (Paris) April 19.

Fever in Convalescence of Typhoid Fever. POTAIN.—Among the causes that may induce fever are coprostasis, the return to solid food, "febris carnis" and its aggravated form, resembling chronic enteritis in its symptoms, inflammation of the kidneys, biliary passages and other organs and suppurations. The slight recurrences of fever which Potain calls "reiterations" are merely after-claps of the primary infection. The complications occurring in convalescence are caused by Eberth's bacillus alone, or by a combination of bacteria, or a secondary infection. There are also cases in which the fever seems to be absolutely without a cause, as in Parson's case of three weeks of typhoid fever with a perfect convalescence until the eighty fifth day, when an inexplicable idiopathic fever appeared which lasted until the 272d day. ["Starvation fever" might be added to the above.—ED.]

Presse Medicale (Paris), April 19.

Treatment of Pseudo-arthrosis and Certain Fractures with Internal Metal Prothesis. J. POTARCE.—The writer describes a couple of cases in which the pseudo-arthrosis resulting from an old fracture of the clavicle and humerus was resected and the smooth, clean stumps of the bone brought together and held with a nickel plate and four screws. The plate was removed in thirty to forty days under chloroform and the consolidation found perfect. Animals operated on in the same way are still wearing their nickel plates encysted under the periosteum without reaction or discomfort.

Bulletin de l'Academie de Medecine (Paris), April 11.

Congenital Torticollis Cured by Subcutaneous Tenotomy. P. BERGER.—An extreme case of retraction of the right sterno cleido-mastoid, causing scoliosis and asymmetric deformity of the face and skull, was cured by simply cutting the sternal and clavicular origins of the muscle separately, from below outward, through a couple of puncture holes, without an incision. A plaster cast, massage and modeling manipulations completed the cure of the deformity, which had evidently occurred during birth, which had been a pelvic presentation. The liabilities to deformities of this kind with this presentation should be remembered by the obstetrician, as massage and modeling at the time will frequently restore the conditions to normal.

Annales de la Soc. Med. Chir. de Liege, March.

Sanitariums for the Tuberculous Poor. MALVOZ.—The writer concludes a review of what has been accomplished to date in this line with the statement: "Those who are not following the progress of this benevolence from day to day in Germany, have no conception of the extent in which this great country is in advance of all others in respect to the prophylaxis of tuberculosis. She already has thirty large sanitariums for the people and will soon have a hundred in operation, as the sick-insurance societies and the Red Cross are co operating with the local authorities to establish them wherever needed.

Centralblatt f. Chirurgie (Leipsic), April 22.

Plastic Surgery of Bladder. M. RUTKOWSKI—Still another means of relieving ectopia vesicæ is described, with a case successfully operated on. A loop of the ileum was drawn out; a portion six centimeters in length cut out of it and the intestine then sewed together again. The excised portion was slit lengthwise at the lowest point, when it formed a square flat flap hanging by a mesenterial stem, and this flap was applied and sutured to close the defect in the bladder. The subject wears a urinal and a truss to compress the urethra, with which he can retain his urine for three-fourths of an hour.

Centralblatt f. Gynecologie (Leipsic), 1899, No. 14.

Plastic Utilization of Uterus in Prolapsus. E. WERTHEIM.—Inspired by W. A. Freund's method of closing a vesicovaginal fistula by pivoting the uterus down into the vagina and using its wall for the plastic flap, Wertheim has applied the same process to a couple of cases of severe prolapsus with cystocele. The anterior fornix was incised, the uterus drawn down into the vagina after opening the plica vesico-uterina, and both corners of the incision sutured up to the collum. The anterior vaginal wall was then freshened and the posterior surface of the corpus uteri sutured to it, with smooth recovery. The uncovered anterior wall of the uterus presented at first a red granulating surface which gradually decreased in size.

Munchener Medicinische Wochenschrift, April 18.

Influence of Certain Drugs on Formation and Excretion of Uric Acid. K. BOHLAND.—The importance of this subject in relation to the treatment of gout is demonstrated by the results of numerous tests on healthy persons, which establish that one to three grams a day of tannic acid materially diminish the formation and excretion of uric acid. The same effect is attained with secale cornutum, atropin, and still more pronounced with quinin. The tests failed to confirm the assertions that the number of leucoytes in the blood increases and diminishes parallel to the amount of uric acid eliminated.

Janus (Amsterdam), May.

Bacteriologic Analysis of the Water at Djeddah. STÉKOULIS.—There has been no outbreak of cholera at Djeddah for four years, and yet the best drinking water obtainable contains 100,000 bacteria to the cubic centimeter, among which is constantly noted a vibrio resembling that of cholera in every particular (150 to 200 per c.c.), except that it does not reduce nitrates nor produce indol. It caused fatal vibrionic septicemia in the small animals inoculated, and killed seven out of every ten young rabbits ingested with it, with a fulminating choleraic intestinal affection; but the populace drink the water with apparent impunity.

Societies.

COMING MEETINGS.

American Association of Genito-Urinary Surgeons, Niagara Falls, N. Y., May 25.
American Dermatological Association, New York City, June 6.
American Laryngological Association, Chicago, May 22-24.
American Medico-Psychological Association, New York City, May 23.
American Orthopedic Association, New York City, May 16.
Association of American Physicians, Washington, D. C., May 24.
Connecticut Medical Society, Hartford, May 24.
Illinois State Medical Society, Cairo, May 16-18.
Indiana State Medical Society, Indianapolis, June 1.
Indian Territory Medical Association, So. McAlester, June 6.
International Association of Railway Surgeons, Richmond, Va., May.
Kentucky State Medical Society, Louisville, May 16.
Louisiana State Medical Society, New Orleans, May 16-18.
Maine Medical Association, Bangor, June 7.
Montana, Medical Association of, Butte, May 24.
New Hampshire Medical Society, Concord, May 25-26.
North Carolina, Medical Society of State of, Asheville, May 30.
North Dakota State Medical Society, Fargo, May 24-25.
Oklahoma Territory Medical Society, Oklahoma City, May 19.
Pennsylvania, Medical Society of State of, Johnstown, May 16.
Rhode Island Medical Society, Providence, June 1.

Congress to Prevent Abuse of Tobacco.—The second international congress will meet at Paris in August, 1900.

Warwick County Medical Society.—The election of officers, at the recent meeting of this society, held at Boonville, Ind., resulted as follows: President, E. A. West; vice president, D. A. DeForest; secretary, W. A. Hewins.

Jefferson Alumni Dinner.—On May 15 the Alumni Association of Jefferson Medical College, Philadelphia, will give a dinner at the Art Club. Provost Harrison and others of the University of Pennsylvania will make addresses.

Posey County Medical Society.—The officers for this society, elected recently at Mt. Vernon, Ind., are: President, J. B. Williams, Grafton; vice president, J. W. Powell, Mt. Vernon; secretary and treasurer, T. W. Wilson, New Harmony.

International Congress of the Medical Press.—This congress will convene at Paris, July 27 to 29, 1900. The committee of organization consists of Cornil, president: Lucas Championniére and Laborde, vice presidents; Blondel, secretary, and Cézilly, treasurer.

American Gastro-Enterological Association.—At the close of the annual meeting, recently held in Washington, D. C., the following officers were elected for 1900: President, Max Einhorn, New York; first vice-president, John C. Hemmeter, Baltimore; second vice president, D. W. Booker; secretary and treasurer, Charles D. Aaron, Detroit.

Linton District Medical Society.—The twenty-seventh annual session of this Missouri society was held at Mexico, May 4.

The election of officers resulted in: President, L. O. Rodes, Mexico; vice-presidents, T. J. Tainter, Warren, and David Nowlin, Montgomery; treasurer, Martin Yates, Fulton; secretary, E. S. Cave, Mexico.

Southwest Missouri Medical Society.—This society, at a recent meeting held in Springfield, Mo., elected the following officers: President, H. B. Freeman, Joplin; vice-president, F. P. Fuson, Mansfield; secretary, C. E. Fulton, Springfield; treasurer, K. C. Shuttee, West Plains; corresponding secretary, J. W. Love, Springfield.

Texas Medical Association.—The recent session of this association, held in San Antonio, April 25-28, was the thirty-first annual. The committee on legislation was instructed to concentrate its efforts to have the Legislature pass a law creating a State board of medical examiners and let all other proposed legislative reforms go by default at present. The plan is to push one reform at a time.

Prince George's County Medical Association.—The physicians of Prince George's County, Md., May 2, at Upper Marlboro, perfected the organization of this association. Dr. Charles A. Wells of Hyattsville, was elected president, M. D. Hume, vice president, French Owens, Marlboro, secretary, and L. A. Griffith, treasurer. The annual meeting will be held in May of each year, at Upper Marlboro.

Wisconsin State Medical Society.—The fifty-third annual session of this society closed May 5, at Oshkosh. About one hundred physicians were in attendance, and the following were chosen officers for the coming year: President, W. T. Sarles, Sparta; first vice-president, C. W. Oviatt, Oshkosh; second vice-president, A. F. Fuchs, Loyal; secretary, C. S. Sheldon, Madison; treasurer, S. S. Hall, Ripon.

Association of American Physicians.—The fourteenth annual meeting of this association was held in Washington, D. C., May 2-4, and the following officers elected: President, E. G. Janeway, New York; vice-president, William H. Welch, Baltimore; recorder, I. Minis Hays, Philadelphia; secretary, Henry Hun, Albany, N. Y.; treasurer, J. P. Crozer Griffith, Philadelphia; councilor, William T. Councilman, Boston. Abstracts of the leading papers read at this meeting appeared in the JOURNAL, May 6, pp. 985, 1013, 1014.

Washington Obstetrical and Gynecological Society.—The 299th meeting of the society was held on the 5th instant. Dr. Bromwell read the essay of the evening, entitled "Cerebral Complications of Mumps." He reported two cases, one a young woman, white, age 18, who developed meningitis during an attack of mumps, and died. No post mortem was permitted. The other, a child aged 11, developed meningitis during an attack of mumps, but eventually recovered. The symptoms in the gland disappeared with the onset of the cerebral symptoms, reappearing when the cerebral symptoms subsided.

Medical Officers of Confederacy.—The Association of Medical Officers of the Army and Navy of the Confederacy will meet during the present month at Charleston. Dr. J. B. Cowan, General Forest's medical director, is president and Dr. V. G. Hitt of Atlanta, secretary. All surgeons, assistant surgeons, contract surgeons and hospital stewards who served in the Army and Navy of the Confederacy, are eligible for membership. The objects of the association are social, fraternal, and for the preservation of medical history. Each member is expected to read a paper on such medical subjects as came within his experience during the war. Stenographic reports of all discussions at meetings will be made.

German Congress of Internal Medicine.—The seventeenth congress was held at Carlsbad, April 11 to 14, with 347 members enrolled, and the advantages of a resort and watering-place for a scientific gathering of the kind were found to be "immense." The principal features of the congress were the addresses on leukemia and leucocytosis and on insufficiency of the cardiac musculature. Löwit, in the former, claimed to have discovered the parasite of myelemia—the "hemamœba leukemiæ magna"—and of lymphemia—the "hemamœba leukemiæ vivax"—but did not reveal his methods. The addresses on the heart musculature demonstrated that almost nothing is settled yet in regard to our knowledge of the pathogenesis and anatomy of the heart. Schwalbe observes "everything is afloat again." Schrötter's address was a valuable summary of our clinic knowledge.—*Deutsche Med. Woch.*, April 20.

Association of Military Surgeons of the United States.—The president of this association, Lieut.-Col. J. D. Griffith, medical director Missouri National Guard, has issued a circular announcing the next meeting for Kansas City, Mo., September 27-29 next. The meeting was to have been held in Kansas City in June, 1898, but was postponed on account of the war with Spain. The recent war, in which so many of the members of the association took a prominent part, makes the coming meeting interesting to a most unusual degree, and it is earnestly hoped that there may be a large attendance. Many questions have been solved by the war, and many new questions have arisen, hence the program will be most interesting. Col. Chas. H. Alden, assistant surgeon-general U. S. A., having felt compelled by the stress of events to resign as chairman of the literary committee, Brig.-Gen. Geo. Cook, surgeon-general (retired) of the New Hampshire National Guard, is announced as his successor in the chairmanship of this committee, and will have charge of the program for the coming meeting. Those willing to contribute papers for the meeting should address Gen. Cook, 16 Centre Street, Concord, N. H.

New Hampshire Medical Society.—The program for the 108th annual session of this society, Concord, May 25 and 26, contains the following:

1. Insanity in Its Relation to Crime. Chauncey Adams, Concord.
2. Report on Surgery. H. L. Stickney, Newport.
3. Report of a Few Surgical Cases. George P. Morgan, Dover.
4. Tympano Mastoiditis. Emdon Fritz, Manchester.
5. Some Forms of Paralysis Observed in Country Practice. Chas. H. Cutler, Peterborough.
6. Vaginal Hysterectomy and When Indicated. Noel E. Guillet, Manchester.
7. Tubercular Disease of the Urinary Apparatus. J. M. Gile, Hanover.
8. Multiple Pregnancy; Report of Cases. A. W. Shea, Nashua.
9. Report of Case of Puerpural Eclampsia with Complications. Edmund E. Hill, Suncook.
10. Theory vs. Fact. William F. Wallace, Plaistow.
11. Odds and Ends. A. F. Wheat, Manchester.
12. Pneumonia in Children. W. H. Aldrich, Marlborough.
13. Hemostasis in Intrapelvic Surgery. A. C. Heffenger Portsmouth.
14. Rationale of Medicine. S. W. Roberts, Wakefield.
15. Embolism of Mesenteric Vessels. O. W. Goss, Lakeport.

Medical Society of the State of California.

Twenty-ninth Annual Meeting, Monterey, April 18-20, 1899.

TOXIC BASIS OF INSANITY.

Dr. H. E. SANDERSON of Stockton, in this paper, first reviewed the historic phases through which theories of insanity had passed and then took up a consideration of the more modern beliefs. The introduction of the microscope into the careful study of the anatomy and pathology of the brain has shown its tissues to be subject to the same pathologic changes which we find occurring in other organs and tissues. The cortex of the brain, so largely composed of neurons, is found to be degenerated in most cases. It is well recognized that diseases very profoundly modify many forms of insanity. The predisposing cause is probably an inherited instability; the more direct causes are general disease, artificial living, traumatisms, shocks, etc. Religious excitement may increase the liability to become insane and alcohol plays an important part in the problem of causation. He called attention to the historic cases of Pitt and Ben Johnson, in both of whom, in their later years,

periods of insanity were interrupted by epochs of lucidity when they had attacks of gout. The inference was suggested that during the time of insanity the toxic elements affected the brain, but when the action was directed to some other region the brain regained its normal tone for the time being and lucidity resulted. On this hypothesis insanity would simply be a perverted cell action due to toxemia. In many of the insane there seems to be a connection between nephritis and insanity. One-half to three quarters of the insane exhibit nephritis. There seems also to be a parenchymatous degeneration of the cortex similar to that of the kidneys.

The true cause of insanity must remain unknown for some time, owing to the great difficulty in making experiments, but it is probably caused, certainly in the majority of cases, by toxins, either of bacterial or auto-origin. Sexuality, anemia, operation do not influence toward insanity. Animal extracts have been used with good results, especially the thyroid extract in doses of not to exceed 60 grains per day, in puerperal and climacteric insanities. All measures which tend to increase elimination and improve the tone of the individual are indicated in the treatment.

OBSESSIONS.

Dr. LEO NEWMARK of San Francisco presented a paper on this subject, saying there are certain cases occasionally met with which present features of interest. He referred briefly to certain peculiar mental phases, as imperative conceptions, etc., but stated that a case of true obsessions is one in which the patient himself realizes that the ideas are merely ideas, untrue in themselves and having no basis in fact, and is anxious to rid himself of them. A case in point was cited: A young man when in the society of women under circumstances where it was impossible to retire, would immediately feel peristalsis in excess and have a desire to go to stool, which would culminate in an evacuation of the bowels; if he knew that he could retire, then there was not the desire. When away from the society of women he was perfectly normal. Three ounces of paregoric, taken before voluntarily joining some women, as an experiment, did not check the bowel action. The condition has no influence on the mind tending toward insanity, as these patients generally imagine to be the case. They are neuropaths, and suggestion, though it may give relief, does not cure, for they are subject to relapses at any time.

DIAGNOSIS AND MODERN TREATMENT OF PULMONARY TUBERCULOSIS.

Dr. GEO. L. COLE of Los Angeles read this paper. Some things should make one watch for the disease; repeated attacks of grip; with chronic cough the sputum should be very carefully examined, not once but many times; with pleurisy and effusion, the aspirating needle should always be used; any loss of weight not accounted for should be suspicious; an increased pulse-rate should demand careful examination and watching. The physical examination should be most careful and thorough. It is well to have the patient hold his hands above the head, when the space under the scapula may be better examined. The diagnosis by means of tuberculin is a safe and justifiable procedure. The use of potassium iodid is also useful in many cases. Many cases recover without any treatment; with treatment, therefore, a case has a much better chance of recovery. Dr. Cole had used tubercular serum; in some cases he had found it to be of great value, in others it seemed to do harm. It generally made the patient feel more comfortable in any event. Several cases had returned to their normal weight and habit and did not exhibit any symptoms or signs of tuberculosis, nor could any tubercular bacilli now be found in the sputum. He thought they were cured.

He has also used the antipneumonia and antierysipelas serums. In a case of erysipelas he found that 10 c.c. had no effect, but a larger amount seemed to check the disease and made the patient feel much better. The disease was arrested on the third day. In a case of pneumonia he had used some 70 c.c. of the serum altogether. The affected lung did not solidify, and six hours after the injection the patient felt much better, and in a few days made a good recovery. Though yet in the experimental stage, and while one case was not enough to draw any conclusion from, the serum treatment was certainly very promising and worth an extended trial.

Dr. HERBERT K. MOFFITT of San Francisco said that too much care could not be given to the question of diagnosis; that many mistakes were made by not knowing what to look for, or not paying attention to looking for the things which should be noted. A regular plan or course of examination should be adopted and adhered to in all examinations. In all sick persons an examination of the lungs should be a routine procedure as much as examination of the urine. Inspection should be thorough and careful; percussion is more valuable and much information may be gained through its aid; by the use of inspection, percussion and auscultation, we should get a good idea of the actual condition of the chest. Attention to little things should not be forgotten, as, for instance, the side on which the patient sleeps, as this may alter the findings of examination. The sputum examination is most valuable, but the diazo reaction of the urine should not be forgotten. The use of tuberculin is valuable; the injection of sputum into animals is also valuable; care should be taken in looking for bacilli in sputum, as often there are only a few. When tuberculin is used, the dose should not be extremely small; 5 to 10 mg. should be used at first, and increased to 20 if necessary. The X ray examination may be of value in showing the size of the area involved. It probably does not reveal the presence of the disease before it could be detected by other means.

Dr. CHAS. G. LEVISON called attention to a method he has used for some years, to avoid the delay in examining sputum. He stirs the sputum in a little water and thus dissolves out the mucin, the lung-tissue being precipitated to the bottom of the vessel.

Dr. WM. OPHULS had one objection to the tuberculin test; it is too sensitive. The presence of a small caseated spot will give rise to the reaction. A student of Koch's has reported using the tuberculin in a large number of cases in a hospital; it is remarkable that the reaction was noticed in a great number of these cases which were in the hospital for some other trouble. It is probable that in all of them there was some tuberculous lesion, but that they were all phthisical is not to be believed.

Dr. PHILIP MILLS JONES of San Francisco had made some experiments with the X-rays, and followed the work of a number of investigators in Germany, in order to ascertain whether they possessed any therapeutic value. Some cases of undoubted tuberculosis had rapidly and steadily improved and now did not exhibit any symptoms of the disease, nor could any bacilli be found in the sputum. The cases were too few in number to draw any conclusions, but it seems a promising field. A case of lupus which had resisted all treatment for the past seven years very promptly healed up and seems to be perfectly well; time alone can show the truth or falsity of this result. As an aid to diagnosis, there can be no question of the value of X-ray examinations. He has seen a number of cases where consolidation of one or both apices was noted by an X-ray examination, and in which there was absolutely no symptom or indication of the condition.

Dr. J. HENRY BARBAT had worked with Dr. Jones in two of the cases which seemed to be cured, had examined a large number of patients with the Doctor, and could substantiate all that Dr. Jones said. The exposure to the X-rays was made for from three to twenty minutes twice a week; the unexposed areas were protected by means of a screen of sheet lead. Two of the cases are now absolutely well; whether the cure was due to the X-ray exposure, to tonic treatment or to spontaneous cure, is impossible to say; but they are well.

Dr. J. DENIS ARNOLD of San Francisco pointed out a very early sign not to be forgotten—the peculiar wax-like edema of the mucous membrane of the trachea and larynx, often noted before any symptom calls attention to the presence of tuberculosis.

Dr. COLE, in closing the discussion, said he had asked a number who had made use of the X-rays, whether they were of valuable aid in the diagnosis. From the reports he had concluded that no lesion could be thus detected that could not be made out in other ways. In examining the sputum, it is well to allow it to stand for twelve to twenty-four hours, and thus avoid the necessity for using the centrifuge.

TYPHOID FEVER, WITH DEATH IN ONE WEEK FROM ONSET—AUTOPSY FINDINGS.

Dr. WM. FITCH CHENEY presented this paper. The case occurred in a man of 25, who could speak nothing but Italian, and when first seen could not understand any questions asked. The history was obtained from friends of the patient. When seen, Feb. 12, 1899, he was delirious, had been well up to the Tuesday of the previous week; then went to bed feeling sick. By Thursday he was delirious and was removed to the Lane Hospital. Seen one hour after admission he was pale and cyanotic, with an anxious look and objected to being touched. He coughed frequently; the respirations were 56, pulse 128 and dicrotic, and temperature 106. There was marked dulness over the right lung. Diagnosis: lobar pneumonia on account of the rapid onset, high fever, cough, right lung dulness, etc. There was, however, no rusty sputum and the abdomen was so distended that the liver and spleen could not be well made out. Under cold baths every hour the temperature fell somewhat, but the other symptoms did not change. The following

day did not show any change, and the enormously swollen abdomen looked suspicious. The Widal reaction was obtained; leucocytosis of 17,500. The bowels had not moved and did not, in spite of enemas of soap and water and turpentin. Sweating appeared and the man grew lower and lower till he finally died one week after the onset of the disease. Autopsy showed almost every solitary gland along the entire intestine affected; this was doubtless the reason for the extreme toxicity of the disease; there were no ulcers; the liver and spleen were greatly enlarged.

LITHOLAPAXY.

Dr. GEORGE CHISMORE exhibited an improvement in his instrument for litholapaxy, the principal improvement noted being an appliance to be used for crushing the very hardest stones. It consists in an additional handle which is attached to the handle of the instrument; when in place and the stone located in the jaws of the lithotrite, it may be tapped or pressed with this handle; for larger and firmer fragments a rack and pinion arrangement for squeezing is applied, and for the very hardest stones a percussor may be attached which, by means of an automatic device, strikes a severe blow upon the jaw of the lithotrite and can crush any stone. The shattering effect of light, quick blows is beautifully illustrated in this device.

VESICAL TUMORS.

Dr. GRANVILLE MACGOWAN, of Los Angeles, presented a report of ten operative cases of vesical tumors. He said that the improvements in the cystoscope now make operations on the interior of the bladder easy. The cleansing and emptying of the bladder produces very great relief. Patients are prepared for a number of days with urotropin; neighboring parts are shaven and the patient prepared as for any capital operation. Chloroform is preferred as an anesthetic. Incision is made to the layer of connective tissue over the bladder; a small incision, crosswise, is made into the tissue and the bladder opened by a long straight knife, all bladder tissues being cut through at once, a pair of long thin artery forceps dropped into the bladder alongside of the knife, and with blunt scissors the wound is enlarged. A suture is then passed near to the middle of the bladder, through the wall of the bladder and the transversalis fascia, the rectus muscle and the skin on each side, from one and one-half to two and one half inches from the edge of the wound. Assistants manage these retractors. The wound may be now enlarged if necessary, and the bladder explored with the finger. The Watson speculum is gently introduced. The Pezzer catheter is used and is of inestimable advantage. The most common cause of death following operations on the bladder is uremia, due to the refusal of the kidneys to do their work.

Dr. GEO. CHISMORE said he had formerly doubted the statement made at a meeting of the society some years ago, to the effect that all tumors of the bladder eventually become malignant. Since that time he had noticed that all of his cases sooner or later developed malignant disease and died. He now thinks that these cases will all die of cancer. It is well, therefore, to operate very soon and do a radical operation. We see epithelioma of the skin cured, and the same result may be achieved with the bladder.

Dr. MACGOWAN, in closing the discussion, agreed that these growths if left alone, would eventually develop into malignant growths.

HYPERTROPHY OF PHARYNGEAL TONSIL AND ITS RELATION TO EAR TROUBLES.

Dr. H. BERT ELLIS of Los Angeles, in his paper on this subject, called attention to the anatomy of the neighboring structures and to the classical essay of Wm. Meyer. The symptoms were then reviewed and attention called to the frequent occurence of nocturnal incontinence in adenoid cases. There is generally disturbance of the digestive organs. The causes are many and various. Frequently it is congenital; may follow many diseases; may be caused by malnutrition. Race, sex, climate, seem to have little to do with the affection. It is largely a lymphoid hypertrophy. Small cysts may be found in the masses. Deafness is due to the rarefaction of the air in the Eustachian canal. Acute otitis may be caused by a retention of the Eustachian secretions, owing to mechanic interference of the large mass. From 57 to 90 per cent. of the deaf mutes in asylums are found to have enlarged pharyngeal tonsils. The most satisfactory method of examination is by means of the finger; a little practice soon teaches one the technic. Operation should be undertaken at once. In young subjects a general anesthetic should be employed, bromid of ethyl seems to be the best. Gottstein's curette is first used, and the forceps then made use of to remove any tissue that may remain. The character of the growth will determine the instrument to be used.

Dr. A. B. MCKEE of San Francisco referred to the effect on the mind, so often noted, in these cases of adenoid enlargement. He considers the acute middle-ear trouble due to infection, often to some infectious disease. There is often enlargement of the glands and probably a tendency to scrofulous disease. Examination can generally be made by the eye and is more satisfactory than with the finger. He prefers not to use an anesthetic, except when the patient is very young, and he then prefers bromid of ethyl. He has never had a serious hemorrhage and thinks it occurs after the use of the forceps, a piece of mucous membrane having been torn away.

OCULAR NEURASTHENIA.

Dr. E. J. OVEREND of Oakland read his paper on this subject, holding that the term asthenopia is too narrow to include the kind of case in which the asthenopia is but one sign of a general neurasthenia; these cases are common. The nervous system in these cases is weakened, and as the eye makes a great drain on nerve forces, the use of the eyes aggravates the neurasthenia. The normal eye is being heavily overworked and this may tend in some cases to produce neurasthenia. Many cases wander from oculist to oculist without benefit, when all that is really needed is rest that will cure the general neurasthenia. Suggestion may be very valuable. Much harm may be done by unjustified operation in many of these cases.

Drs. K. PISCHEL and A. B. MCKEE referred to the difficulty in which the specialist is placed by the general practitioner who sends a case to the specialist hoping that he may find something connected with the eyes to account for some perplexing symptoms, and in which the oculist is unable to find any disturbance of the eyes.

MALARIAL FEVERS OF THE SACRAMENTO AND SAN JOAQUIN VALLEYS.

Dr. PHILIP KING BROWN of San Francisco presented this paper, the result of a careful study of the blood in a large number of persons, both patients in the city and persons living in these localities. He said that the disease was pretty well limited to these localities, as most of the cases found in the city had recently come from these regions, often for the sole purpose of being treated for the disease. The disease was first reported by General Emery, in 1846. Old records are not very reliable, but the disease seems to have developed with, and to have been rare before, the advent of hydraulic mining. Hematozoa are always present in the blood; there are three forms of the disease, and three forms of the hematozoa are found, each coinciding with one form of malaria. There may be two of the organisms present at one time, though they are not interchangeable forms of the same germ. The particular peculiarities of the three forms of the disease, and the direct connection between them and the forms of organisms, were fully pictured by Dr. Brown. The tertian is the most common form of the disease in California. There may be a double tertian, one generation of germs ripening every twenty-four hours. Following a paroxysm there are but few germs to be found in the blood. The quartan variety is not so common. The estivo-autumnal fevers are least common. They exhibit irregular paroxysms; the fever may be continuous and blood parasites are found in multiple groups. Ten to fifteen days may pass without a chill, and the onset may not be in the form of a chill. The disease in this State is mild; it is six to ten times as common as typhoid, but the death-rate is much lower. No case of the third variety is known to have originated in San Francisco; this form is generally fatal. The continued, or so called typhoid type, the estivo-autumnal form, is said to be water-borne, but there is no proof that this is the case. Chinese and negroes are but little susceptible to the disease. The diagnosis of malaria is very often made on insufficient grounds, and much good quinin is wasted. Out of 263 cases in which the blood was examined, and in which the patients thought they had malaria, only ten showed the parasite in the blood. Malaria may complicate typhoid, but there is no such thing as typhoid malaria. Mountain fever is a misnomer; it has been thought to be typhoid by some and malaria by others; it is undoubtedly malaria. It may persist in spite of large doses of quinin, but the organisms can be found in the blood. Specimens of blood showing the three forms of the organism were shown under the microscope.

Dr. GEO. A. HARE of Fresno said that in the section of the San Joaquin Valley in which he resided a great many cases of mistaken diagnosis are reported, as malaria was not so common as thought to be. He deplored the fact that so many cases were wrongly diagnosed, for the reason that it prevented numbers of people from settling in these valleys. Doctors, when first settling in the valleys, reported very many cases of malaria, but as the years passed by they found that they did not have so many cases of true malaria.

Dr. SHERMAN of Merced said that all suspected cases should be submitted to the blood examination. Patients go away from the valleys perfectly well, settle in other regions, and then develop malaria. The disease is not nearly so common as is thought to be the case; it is more common during the irrigation season; rarely occurs except in the summer and fall.

Dr. WM. FITCH CHENEY of San Francisco called up the position of the mosquito in connection with the disease. Dr. Sherman has said that the disease is most common during irrigation, and that it is uncommon where there is running water. This has been demonstrated by Ross. Mosquitoes are found in great numbers near the irrigating ditches. The parasites seem to undergo some change in the interior economy of the mosquito. It is possible, by capturing the mosquitoes from malarial regions, and letting them out in the room of a person who is free from the disease, to inoculate such a person with the disease. It is not claimed that the mosquito is the only factor, but that he is the most important one. Certain regions in which mosquitoes are found are free from malaria, but it is demonstrated that all varieties of mosquito do not carry the disease. Autointoxication may simulate malaria closely. Tuberculosis may be confused with malaria, and sepsis is probably often so mistaken.

Dr. J. HENRY BARBAT thought no person should be treated for malaria till the presence of the parasite in the blood had been demonstrated. He cited several cases in which the symptoms pointed strongly to malaria, but in which blood examination entirely cleared up the diagnosis.

Dr. THOS. W. HUNTINGTON of San Francisco has had seventeen years' experience in the Sacramento Valley, and had noted that a large number of persons brought into the hospital for injuries, from malarial districts, exhibited the disease some days after coming into the hospital, even though they had been quite free from all symptoms before that time. Apparently the patient had the elements of the disease in his body, and all that was needed was a slight injury, lowering the tone of the individual, to bring out the symptoms of the disease.

NAILS IN LEPROSY.

Dr. DOUGLAS W. MONTGOMERY of San Francisco reported a case of marked deformity of the nails (onychogryphosis) in anesthetic leprosy. The patient, 69 years old, was a Hindoo by birth and a laundryman by occupation. He entered the San Francisco pest house in 1881. He was born in Madras and lived there till 20 years old; subsequentiy lived in Singapore, Hongkong and San Francisco. He had worked all the time as a laundryman and always with Chinamen, had had smallpox and a bad venereal sore. There was no further history, except frequent intercourse with Chinese women and a general loose life. For eight or ten years he had had no sexual desire whatever. There was no history of leprosy in the family and no idea when or where contracted. He first noted swelling of the hands about twenty years before seen, while in Virginia City, Nev.

When examined he showed no indication of any paralysis or atrophy of the face; no indications of leprosy on the cutaneous surface generally; no lymphatic nodules demonstrable; lower extremities normal; knee jerks present; right ulnar nerve slightly enlarged; fusiform enlargement of the nerve above the epitrochlear groove; tenderness along right median; fingers of right hand slightly flexed and beds of the nails beginning to hypertrophy. In other respects, save for commencing contraction of the palm, the hand was normal. On the left side the median nerve was not demonstrable; large fusiform swelling of the ulnar above the epitrochlear groove; sensations of touch, heat and cold ceased at the junction of the middle and lower thirds; sensation of pain ceased at the wrist; shape distorted; thrown back upon the wrist. The fingers were greatly deformed and the nails looked like solid horns.

He died July 9, 1895. The post-mortem was not a complete one; we simply removed the brain and cord, took off the hands and feet, and removed the ulnar nerves at the elbows. The brain was wet, but otherwise normal; cord normal; no evidence of syringomyelia; ulnar nerves sclerosed and thickened; left nerve showed but few nerve-fibers remaining; no lepra bacilli found. The case was seen late, at a time when self cure had probably taken place; therefore no blotches were observed. The ankylosis of the fingers was true bony ankylosis, the joint spaces being filled with a dense bony mass.

Dr. F. B. CARPENTER of San Francisco had seen very many cases of leprosy while living in the Hawaiian Islands some years ago, and it was quite common to see ankylosis, but not true bony ankylosis. He had seen one case of enlargement of the nail similar to the present case, but generally there was atrophy and the nail dropped off. This was a case of leprosy in spite of the absence of the lepra bacillus.

TWO SUCCESSFUL CASES OF AMPUTATION THROUGH THE HIP JOINT BY WYETH'S METHOD.

Dr. CHAS. G. LEVISON of San Francisco presented this paper, to appear in the JOURNAL.

TRANSPLANTATION OF THE OVARIES.

Dr. J. F. MCCONE of San Francisco presented a preliminary report. He had experimented a good deal with dogs and rabbits and found that the post-operative changes found to occur in the uterus and appendages, with their train of unpleasant symptoms, did not occur when a piece of ovarian tissue was planted in the abdomen after removal of the ovaries. He found that he could transplant the ovary from one variety of rabbit to another variety and the animal possessing the transplanted ovary would, or rather could, become pregnant.

Prof. JOS. LE CONTE of the University of California pointed out that it is not necessary that the Fallopian tubes grasp the ovary in order for them to get the ovum. We do not understand how the ovum does reach the tube. The Doctor has successfully shown that the ovarian tissue may be planted in any part of the body and still preserve the uterus and the sexual functions. He is not at all sure as to the result when dog's ovaries are transplanted to the rabbit.

Professor Le Conte was asked for an expression of opinion on the much vexed question of vivisection. He said the trouble arose because the two sides do not really understand each other. Those who object have more sentiment than judgment. All life should be held sacred, but it should receive consideration commensurate with its elevation. It is better to kill a thousand dogs than to needlessly sacrifice the life of one man.

INTESTINAL ANASTOMOSIS.

Dr. J. HENRY BARBAT of San Francisco read a paper on this subject, which will appear in the JOURNAL.

INTRAVENOUS INJECTIONS OF MERCURY IN THE TREATMENT OF SYPHILIS.

Dr. F. DUDLEY TAIT of San Francisco read a paper on this subject, to appear in the JOURNAL.

CASES OF DOUBLE SYNCHRONOUS AMPUTATION OF THE LOWER EXTREMITIES.

Dr. THOS. W. HUNTINGTON of San Francisco reported three cases, and his paper will appear in the JOURNAL.

The officers for the ensuing year are: President, George Chismore, San Francisco; first vice-president, G.W. Davis, San Francisco; second vice-president, E. E. Kelly, San Francisco; secretary, Philip Mills Jones, San Francisco; treasurer, Thos. Ross, Sacramento.

Chicago Neurological Society.

Meeting, March 24, 1899.

Dr. RICHARD DEWEY, the president, occupied the chair.

CONTAGION AND INFECTION IN NERVOUS AND MENTAL DISEASE AND DEGENERACY, AND MEASURES OF PREVENTION.

Dr. RICHARD DEWEY, in presenting this paper, said in part: We do not ordinarily think of nervous maladies as contagious or infectious, though they are literally so to some extent. It is, however, concerning mental contagion and infection that the writer wishes to speak. Mental and nervous disease may be and often is conveyed through the influence, direct or indirect, of mind on mind. Nervous disorders, like hysteria and chorea, may spread from a single sufferer to an indefinite number of persons. The understanding of the precise modus operandi awaits the completion of combined investigations by physiologic and pathologic psychologists. The work of mental contagion is accomplished in a number of ways; it is immediate and direct or slower in its working, involving a period of incubation and gradual evolution; or again mental contagion and infection are spread by the process of procreation and inheritance. Examples of direct mental contagion are the epidemics so often recorded in history, especially in the Middle Ages, like those of flagellation, tarantism, the dancing manias and the convulsive epidemics, many of which phenomena continue in recent times.

Degeneracy may be considered one of the results of infection and it is true that the human ovum or spermatozoid may be regarded as a microbe of all degenerative diseases, and this fact renders propagation of nervous and mental diseases by extension from generation to generation the most serious morbific influence with which we have to contend.

Mental contagion in its slower working is illustrated by insanity, hysteria and chorea affecting members of the same family or inmates of the same house and slowly developing, like the *folie à deux* of the French writers, which indeed often

includes three or four victims in one house or family—I have seen five members of one family affected at the same time.

Inheritance in mental and nervous infection is so well known that it does not need to be dwelt upon at length. In all cases where nervous and mental infection or contagion occurs, we must recognize that the individuals are for the most part constitutionally predisposed.

In considering the question of prevention, one is reminded of the complaint which is often heard at the present time, that we are fostering mental disease and degeneracy by elaborate care of its victims, which promotes the "survival of the unfittest," and it is often urged that measures which would promote the speedy removal of those capable of propagating nervous disease and insanity would be justifiable. A juster view, it seems to the writer, is that, although the conditions of degeneracy, insanity and nervous disease are unfavorable today, they are in reality less mischievous than in former ages. To admit that our condition is growing worse would be to ignore the known and certain tendency of both mind and body to free themselves from disease under improved conditions. It is nevertheless true that it is of the utmost importance to society to find remedies for what we all admit is one of the great evils of our time. If we inquire what may be done to stem the rising tide of disease and degeneracy propagated from mind to mind, we hear various replies. The remedies suggested are: Enaction of laws for permanent sequestration of all victims of such disease or defect; the providing of "euthanasia" for all incurables; likewise such restriction as would render it impossible for degenerate individuals to propagate their kind, as by refusing permission to marry; or by surgical procedure removing the essential organs of reproduction.

Most of these suggestions of legal remedies are crude and impracticable; they contravene fundamental principles and come under the head of class legislation. In enlightened communities application of law to cases of this kind would only be permitted where clearest and most unmistakable lines could be laid down; and in these diseases and defects it is a matter of impossibility to draw universally satisfactory lines.

Laws have been enacted and enforced in recent times regulating and controlling the contagion of diphtheria, smallpox, etc., and when equally definite principles of diagnosis and treatment have been attained in these diseases, some measure of legal control may become possible, but to-day if a law were enacted giving power to permanently imprison, to restrict and castrate certain insane, imbecile, epileptic, inebriate or degenerate beings, if we endeavor to think out the steps by which such a board would proceed, we see the futility of such legislation. It is the degenerate or insane person who is close to the normal line, and who is perhaps at different times upon both sides of it, who can be controlled by no law and yet produces in every sense the most evil by his existence in the community.

For the present, the efforts that physicians and scientific men can make to enlighten the public mind seems to be the only resource. The ignorance of the masses upon these subjects is the reason why such deplorable conditions of mental sanitation exist. These evils, like those of prostitution, venereal disease, intemperance, are a perpetual scourge to the welfare of society and yet defy the utmost ingenuity of the law-making power to control, except where they become amenable to the plain provisions of the common law. But a citizen of even moderate intelligence, who would resist a compulsory law, if brought to see the workings of inheritance, of contagion and infection in mental disease and defect, would in many cases voluntarily avoid the penalties imposed by nature. It is probable that if the time ever arrives when legislation forbidding marriage, requiring castration, or providing a peaceful death for incurables, could be enacted, the time would also have arrived when it would not be needed.

Public opinion will not tolerate legislation which risks the oppression of innocent persons, neither will any measure which is harsh or brutal be countenanced, even against the most worthless and imbecile; nor will law be favored which trifles with human life, even the life of the most useless and degraded. For these reasons legislation contemplating permanent imprisonment, forbidding the right to marry and to give in marriage of any person because it is probable his or her offspring will be insane or degenerate, or proposing that an innocent citizen shall submit to a surgical operation contrary to his will, must at present fail of enactment or, if enacted, fail of enforcement. Ten men will agree that right of marriage should be denied in such a case, or that the individual should be emasculated, but let one of the ten be touched in his person or family by such a regulation and he will set it at defiance, and the courts would often sustain him in doing so. There is a general opposition in human nature to being made virtuous by "act of Congress." Thus the propagation of disease seems to go onward unimpeded, and it may be that our race is thereby becoming more and more degenerate and incapable. But in taking so dark a view do we not lose sight of certain saving agencies in the unwritten laws of evolution and devolution? If we must admit that our benevolence and easy tolerance of defective humanity permit in some measure the survival of unfit persons, still this fact may be regarded as an incident in the larger movement which makes for universal health. The study and comparison of conditions can but convince the candid mind that they progressively improve and any evil incident to our fostering of the unfit is a negative quantity compared with the whole trend of sanitary and hygienic thought and action. Imbecility, inebriety and insanity tend to extinguish themselves even without the aid of intelligence and justice, and when we add these agencies we have a force which, working in harmony with natural laws, can purify and lift the whole fabric of society. It is, therefore, by education and instruction disseminated earnestly and incessantly throughout the community that we have our chief means of combating these injurious agents, and not by attempting to regulate by statutes things which must be left to the growth of intelligence and mental and moral rectitude in the community.

Dr. SANGER BROWN—Dr. Dewey describes two kinds of infectious influences that are quite distinct. Some of the most striking illustrations of the former are, as he has stated, afforded by the history of Europe during the Middle Ages, when thousands rapidly, almost suddenly, became affected with a powerful frenzy which impelled them eagerly to horrible suffering and even death. To this infection it would appear that both adults and children of all classes were pretty generally vulnerable. Though the influence of thorough education and enlightenment has gone some way in establishing an immunity against this sort of infection and modifying the violence of the symptoms, the patronage bestowed upon "Christian science" and osteopathy shows that a considerable susceptibility yet remains, even among individuals who have achieved more than the average of social and commercial success.

A peculiar and practical paralysis of the reasoning faculties in certain directions, whereby the sufferer enthusiastically and sincerely accepts the most palpably absurd statements as facts, forms a prominent feature in the pathology of this condition. Mankind en masse is far more susceptible than in isolation, for the accomplished orator can frequently commit an audience almost unanimously to a course quite contrary to common sense, by the employment of arguments which the individuals composing the audience would not entertain for a moment being alone. In their earlier and more virulent stages, these epidemics frequently result in considerable loss of life and transposition of property, then they gradually subside, without, however, protecting the survivors from similar subsequent attacks.

A well-educated individual, with sound and well trained reasoning faculties, can never be a genuine victim of this disease, though he may from various motives successfully simulate the symptoms.

Regarding the second division of the paper, which refers to the slower and more subtle forms of infection emanating from a highly complex civilization, and poisoning the minds of individuals spoken of as degenerates, there is certainly much to be said. I think I may say that the term "degeneracy" has come into such frequent use of late that there is always more or less uncertainty as to what is meant by it. In general terms perhaps it nearly always implies a certain disproportion between the various parts of the nervous system (for here we are only concerned with functions of the nervous system), whereby the individual is unable to respond to his environment in a normal manner. If this be accepted, then "degeneracy" is evidently a relative term, for as the environment is constantly increasing in complexity, there will be more and more individuals relatively who will fail to respond to it satisfactorily—more will fall by the way. It is true that educational, mechanic and business methods have been improved and simplified, but notwithstanding this the tax levied upon individual energy has steadily increased. And while some very high types are being developed, the process is horribly destructive and, I am sorry to say, I can not share the sanguine hopes of the essayist that progress is being made toward a condition of more comfort and security.

Dr. HAROLD N. MOYER—In a general way, I agree with Dr. Dewey's statements; regarding some of them, perhaps I might differ, particularly as to the proposition as to whether degeneracy is increasing or not. Degenerates have always existed, and if we read the histories of peoples and countries, we find most extraordinary examples of degenerate nations. We are led to think that it is increasing, because of the very great

study that has of late been devoted to this branch. Insanity, a subdivision of degeneracy, is probably no more common now than it was formerly. Our knowledge of it has very much increased. As Dr. Brown has said, civilization is becoming enormously complex; the number of points at which the individual touches others in our modern civilization is very great. Any aberration of mind is at once apparent and unfits us for the place occupied. In a simpler condition of society such would not be the case. Many a case of mental disease in our rural districts never sees an asylum, perhaps never comes under the charge of a physician. Such patients live in the family. Their environment is, in a social sense, exceedingly narrow. That factor has to be borne in mind when we come to estimate the increase or decrease in insanity. Take, for example, the savage races, the insane person probably, unless his mental aberration is exceedingly marked and leads to absolute violence toward others, attracts little attention. The same thing is true of animals; insanity is not at all uncommon in the lower animals. In the domestic animals it is frequently noted. In the elephant a well-recognized form of mental aberration is observed by those men who have to care for elephants in India. The rogue elephant is excluded from the tribe. The recognition of degeneracy in its various forms leads us to think it is increasing.

Another element must not be forgotten, namely, that the average longevity of civilized communities has increased enormously in the last thirty or forty years; that less people die before middle life, and a much larger proportion of the people now live in an age when degeneracy of a certain kind manifests itself most strikingly.

Regarding the efficiency of legislation in the cure of these evils, I can not but be in hearty accord with the essayist; and yet the tentative efforts that have been put forth show that there is an increasing recognition on the part of communities of some of these facts. Legislation, after all, is but an expression of a fairly well-settled conviction in the mind of the public at large. When facts or theories have reached a point where they are accepted by more than a majority of the community, they will always find expression in legislation. Legislation, however, can never be in advance of public opinion. In proportion as it is based on well-recognized opinions of a community, in so far is it effective. At the present time nothing is to be looked for from it, because these opinions are not disseminated in the community; when they become so, perhaps legislation will be effective.

Another unrecognized tendency is toward socialism; individualism is becoming less and less a factor in legislation and in government, and the immense complexity of modern civilization is gradually forcing us into a modified state of socialism. It is increasingly recognized in certain countries; there is much socialistic legislation in Germany, not a little in Switzerland, and tentative efforts are apparent in the legislation of many of our Western States.

Dr. J. J. M. ANGEAR—Perhaps those of us who are teaching in this line are liable to look at one side of the picture too much. The view I have taken of insanity is that it frequently begins with family troubles, generations back, and these family troubles frequently arise from mismating. Young, uncultured men of poor circumstances look for the hands of the cultured and refined daughters of wealthy men. Where such a young man succeeds, the young woman has been reared in the parlor and not in the kitchen. She has been taught to play on the piano rather than on the wash-tub, and by and by, when it is too late, we find that she realizes the fact that she is out of her sphere, and he recognizes the fact that his wife is better adapted to study poetry, painting and music, than to care for children, etc. I have met with a great many such causes of insanity. What is the real cause in such cases but worry—domestic trouble of one kind or another?

Then, again, I have been led to look at insanity as a disease arising from civilization, as being largely due in many cases to undue aspirations, a reaching after the unattainable, and financial reverses. On the board of trade many are doing business on borrowed capital, carrying hundreds of thousands of dollars on their shoulders, and to say that they must not carry their business home to bed with them is next to an impossibility. A man is to-day a millionaire; to-morrow he has not a penny; but he rallies; he borrows, as it were, from the future, his mental strength and business energy, and some of his friends loan him some capital and he is again acquiring property and amassing wealth, but he is carrying a greater burden than ever. That is a condition we can not ignore; we see it; we realize it every day. Every physician meets with evidences of excess—excess of dress; excess at the table, and, above all, sexual excess. It is this which is breaking down the men and women of our time. They fail long before they ought to. This is the present picture. Somebody has said that the trouble is our neuropathic patients do not come to us soon enough; they ought to have come to us (medical profession) two hundred years ago, then perhaps some of these troubles could have been prevented. If we have poverty or loss of social position staring us in the face, is it not reasonable to find more than one individual in a family affected with the same thing? If the father is affected, perhaps the son will be the next, or a daughter, and we have three or four individuals in the entire family suffering from precisely the same cause; this is no evidence of infection. The matter of heredity is naturally in the background of that picture, and not so far back either. Education is not going to remedy this, unless it is specific education—to bring the young people to look at life as it really is, and to let them be looking after the future if they expect to be the center of a family; study adaptability more than wealth and position.

The line of descent of insanity may not have occurred precisely in this way, but there was a constant mental irritation or psychic friction kept up, and in the next generation there were neuroses, and in the subsequent generation psychoses, and the next generation is landed fairly and squarely in the domain of insanity, so that legislation is not going to accomplish much in this direction. There is no legislation that can prevent a man from carrying two or three hundred thousand dollars on his shoulders, and taking it home with him and making bed-pillows of that great debt, which is wearing not only on his physical but also on his mental nature, and the result is that if it does not show itself fully in the present generation, it will in the next, or the next.

Dr. SYDNEY KUH—There is one phase of this question which is generally neglected in such discussions, and that is, that those who have proposed methods for limiting the spread of degeneracy, methods which Dr. Dewey has justly characterized as brutal and impractical, forget entirely that the number of those who are afflicted with the milder types of degeneracy is large; that they are not useless or harmful members of society, but are, on the contrary, not infrequently unusually useful. If we were to limit the spread of degeneracy we would remove all of those, and their removal would be a great loss. Let me mention a few examples. The first four kings of Bavaria were all degenerates, and yet did more for their country than the average sane crowned head of Europe. This is particularly true of Louis II, who did so much to promote art. Only recently, in a very amusing article in one of the current magazines, on certain forms of degeneracy, I read a short report of the life and history of a man who spent part of his life in defending a most absurd theory, namely, that the earth was hollow; that there was an immense hole at either pole, the hole I think, being 10,000 miles in circumference, through which one could enter; that the inside of this hollow body was inhabited and that the inhabitants spoke Hebrew. I happen to know one of the descendants of this man. His son was a poet of more than local fame; the grandson was a teacher at our naval academy, an unusually brilliant man, and an epileptic. The great-grandson, with whom I was intimately acquainted, is now a practicing physician out West. The young man was unusually gifted, but had a slight moral warp. Nietzsche, one of the greatest philosophers of our day, is decidedly a degenerate. A young woman whom I know quite well has a mother who suffers from chronic melancholia; one sister is in an insane asylum; a second or youngest sister committed suicide after the first attack of what would have probably developed into circular psychosis. This young woman suffers from circular psychosis, and in her lucid intervals has made valuable contributions to literature and has displayed unusual talents in other directions. While I do not believe that every man of genius is necessarily insane, there is hardly any doubt that a certain amount of eccentricity—and who can draw a sharp line between eccentricity and degeneracy?—is frequently associated with genius. As I said in my opening remarks, in limiting the spread of degeneracy we would deprive the human race of a large number of its more gifted members.

Dr. HAROLD N. MOYER—If I understand Dr. Dewey correctly, in his paper he deals with contagion and heredity as causes of degeneracy. I would like to ask him if he has formulated any idea as to the probable efficiency of those two causes?

Dr. DEWEY (closing the discussion)—I mentioned three ways in which contagion and infection were operative, but I did not consider any one of them as exclusively the cause in reference to degeneracy. It can not be doubted that degeneracy is slowly brought about by conditions that are born with the individual, and we usually understand by that term persons who are so unsymmetrically developed in brain and mind that they are incapable of adapting themselves to their environment, and that

this lack of symmetry and development is born with them. It would be a very interesting question to discuss as to whether identic conditions may not be the result of post-nasal circumstances, and whether or not degenerates, who were perhaps born normal, have become "degenerate" from external causes, yet I do not feel that we have any reliable data on that subject, and I do not know that I have seen it discussed. I have considered degenerates as coming under the head of those who were not certainly affected by any contagion, but were, if you will permit the term, "infected"; that is, there was a process of disease resulting from the act of procreation, analogous to infection, something derived from one or the other or both parents.

My paper was much condensed, and there is a good deal I would like to have said in that direction. Dr. Walker brought out a valuable suggestion with reference to the education and the proper care of children to prevent or counteract the tendencies existing in early life, and I believe much can be accomplished by judicious care and training of children that are defective. But there is hardly a glimmer of intelligence on this point in the minds of the average parent. This is one of the points on which education is needed.

If I had more time at my disposal I should like to have touched upon what might be called epidemics of insanity that prevail at the present time. I believe the crazes of spiritism, osteopathy, "Christian Science," hypnotism to a certain extent, and magnetism are precisely the same thing, differing from the different circumstances that exist to-day, but that they are of the same nature as the more severe and terrible manifestations of epidemic madness that existed in the earlier days.

In reference to legislation, I doubt very much whether anything practical can be accomplished by the enactment of any law, still I do welcome tentative efforts. We see them made continually, and they are the means of attracting attention to these matters, and leading to more correct views in reference to them by the discussion they bring out. In Michigan a law was enacted two years ago, creating a board which was to have charge of all idiots and castrate them, remove the ovaries in certain cases in which the board deemed it necessary or proper. There was a law enacted in Kansas one time, and at the State institution many boys were castrated, and the superintendent who did the operation reported the most marvelous results in transforming these individuals.

"Boarding out" the insane is done to a considerable extent in this country, particularly in Massachusetts, and in the older countries, such as Switzerland and Belgium, where it is a very extensive business, getting the insane to board in the families of the peasantry, or those who are willing to take them. This is a vicious thing and should be prevented by law. A child brought up with an idiotic or insane person must necessarily be influenced by it. While it is considered bad to put the insane in large institutions, where they suffer from being thrown together, yet considering the good of the community and the means at command, it is the only thing that can be done, and as a result of that evil, which is being recognized throughout the country, there is a strong movement to provide hospital treatment for the acute and curable cases, to separate them as much as possible, and give them the best chance to get well.

Dr. ANGEAR—With reference to your experience, do the insane enjoy each other's society any better than they would the society of the sane?

Dr. DEWEY—There are always a few insane persons in every institution who seem to be well adapted to each other and get along nicely and do well; with others, as far as one can judge, it is a matter of indifference. A large majority are unfortunately affected by being massed with others that are like themselves, or are even worse than themselves.

New York County Medical Association.

Stated Meeting, April 17, 1899.

RECURRING LARYNGEAL STENOSIS AFTER INTUBATION.

Dr. LOUIS FISCHER presented a communication on this subject, in which he referred to and endorsed the opinion of the late Dr. O'Dwyer, that in the large majority of instances this condition was the result of traumatism. Such injury might result from the use of improperly constructed intubation tubes, of tubes of a size not adapted to the individual or from allowing calcareous deposits to form on the tube. A very common cause was unskilful or rough manipulations in connection with the operation of intubation. According to O'Dwyer, the lesion which was responsible for keeping up the stenosis was just below the vocal cords, or in that portion bounded by the cricoid cartilage, and where there was normally a constriction. Prolonged laryngeal stenosis would seldom occur if tubes of proper size and construction were used, if they were introduced with sufficient gentleness, and if it were made a routine practice to remove it every two or three days. A point worthy of note was that calcareous deposits did not form on rubber tubes. He had employed with much success in these cases, a method of intralaryngeal treatment of the ulcer which had been suggested by O'Dwyer. It consisted in the use of tubes coated with medicated gelatin. The best results were obtained by immersing a rubber tube in a hot solution of gelatin containing either 25 per cent. of alum, 20 per cent. of ichthyol, or paraffin medicated with 3 per cent. of iodoform or europhen.

EXTRAUTERINE PREGNANCY.

Dr. HERMAN J. BOLDT read a paper on this subject, dwelling more especially on the advanced cases. Specimens from both a late and an early extrauterine pregnancy were exhibited. The need for greater care in making the diagnosis in the early cases was shown by the history of the patient from whom the specimen was taken. She was a widow, who had menstruated regularly, but had flowed at short intervals for sixteen days. Before she had been seen by him, she had consulted six other physicians, all of whom expressed the opinion that her fainting spell had resulted from loss of blood. On examination, the portio vaginalis had been enlarged and succulent, and there had appeared to be an accumulation of fluid in the pelvis. On performing abdominal section, he had found internal hemorrhage still actively going on, an interstitial pregnancy, and a large rupture extending from the horn of the uterus for some distance into the tube. The important symptoms of early extrauterine pregnancy were: a missed menstruation, intermittent hemorrhages (the blood often being of a peculiar chocolate color, the passing of pieces of decidua, moderate enlargement and softening of the uterus and decided tenderness of the mass.

The treatment of the advanced cases was a serious matter. If the fetus was alive, the patient should be kept under constant and skilled supervision until the first signs of labor, and then the abdomen should be opened. He preferred to operate as soon as possible after the seventh month. If the patient did not come under observation until after the death of the fetus, it was well to postpone operation until it was comparatively certain that the circulation in the placenta had ceased. If this was not done, there was danger of very profuse hemorrhage occurring.

Dr. J. E. JANVRIN spoke of the pioneer work that he had done over ten years ago in the treatment of the early cases. Up to 1886, he, along with a number of other practitioners, had attained a fair amount of success by the use of electricity, but in that year he had treated a case by this method, and the woman had suddenly died within twenty-four hours after the third electric treatment. The autopsy had shown the cause of death to have been the rupture of a small blood-vessel on the surface of the affected Fallopian tube. This had led him to wholly abandon the electric treatment of ectopic gestation, and to raise his voice in favor of laparotomy in all such cases. Laparotomy was indicated, because at the same time as it enabled the physician to make a positive diagnosis it afforded the best opportunity for effective and sound surgical treatment. He had not lost any cases of tubal pregnancy in which he had been allowed to operate early.

The chief symptoms and signs of extrauterine pregnancy were: 1, missing one or more menstrual periods; 2, irregular discharges of blood from the uterus; 3, the discharge of shreds of decidua; 4, slight nausea; 5, slight enlargement of the areola of the breasts; 6, slight enlargement of the uterus, associated with displacement of this organ toward the unaffected side, and the presence of a globular and semifluctuating mass on the other side; 7, marked pulsation of the artery of the unaffected tube, and 8, very marked sensitiveness of the mass itself on pressure.

Dr. ANDREW F. CURRIER discussed the deformities likely to exist in the fetus in a case of advanced extrauterine pregnancy. He said that he had been unable to find on record any cases of fetal deformity earlier than the fifth or sixth month, and called attention to a fact that he thought was but little known or appreciated, i. e., that a not inconsiderable number of these fetuses had been delivered alive by abdominal section. In a series of nineteen cases collected by Champneys the mortality had been 61.1 per cent. The most common deformities were asymmetry of the face and head and clubfoot. The cause of these malformations seemed to be the absorption of the membranes by the peritoneum, thus depriving the fetus of the protection ordinarily afforded by the membranes and the amniotic fluid.

Dr. EDWARD A. AYERS said that in advanced cases of extra-uterine pregnancy the fetus had but a slight chance for life. He had previously reported a series of 101 cases occurring in recent years, with only 20 children still living. The maternal mortality was even now as high as 38.5 per cent., and the reason for this was found in the fact that the management of the placenta in such cases constituted one of the most difficult problems in all surgery. In operating, the vaginal route would hardly be selected except in those cases in which the fetus was not very large and lay well down toward the vagina. As it was practically impossible to determine at the outset whether the fetus was within or without the peritoneal cavity, the primary incision should be made down near the pubes. As the placenta in the extraperitoneal cases often extended forward and pushed the peritoneum upward, it was possible by such a low incision to avoid opening the peritoneal cavity at all. The operator should endeavor to control the circulation by ligation of the ovarian and uterine arteries before attempting to remove the placenta. In some cases the placenta was attached to the abdominal wall, rendering it liable to be divided by the first incision. In other cases it would be found attached to the intestine, or perhaps to the bladder, so that its removal at the primary operation would be out of the question. In view of the many difficulties that beset the operator in this class of cases, the speaker said that he had undertaken a series of experiments with the object of ascertaining if it were possible in practice to control the placental circulation and prevent the decomposition of the placenta for some time by means of certain substances injected into the placenta through the umbilic vein. He had already published the results, which had certainly been encouraging and which had demonstrated, at least, the possibility of postponing the process of decomposition in the placenta for a number of days.

German Congress of Surgery.

Held at Berlin, April 5-8, 1899.

CONDITIONS OF SUCCESSFUL OPERATIONS FOR EPILEPSY.

KOCHER of Berne referred to the modern loss of confidence in these operations, as the formerly accepted percentage of 70 per cent. recoveries has been shown to be erroneous, and Graf and Braun's latest statistics claim only 2 to 4 per cent. cured. Comparing the ultimate results of various methods, it has been found that recoveries are much more frequent when the dura mater has been incised (14 per cent. immediate recoveries without, and 54 per cent. with incision of the dura mater). This fact confirms what he has always claimed, that epilepsy is due to a general or local exaggeration of the intracranial pressure. Opening the dura establishes a safety-valve which regulates this pressure. He has witnessed cases in which mere incision cured not only the epilepsy but a spasmodic paresis. In his six cases of permanent recovery over three years) he finds that the membrane over the trephined spot has remained soft and yielding, while in all the cases of recurrence the defect is closed with a hard, rigid substance. In eighteen cases of complicated fracture of the skull the soft parts were injured sufficiently to form a safety-valve except in one case, and this was the only one affected with epilepsy. Epilepsy can be produced in guinea pigs by repeated slight blows on the head with a hammer, which increases the intracranial pressure, but if the dura mater is incised, it is impossible to induce epilepsy in this way. These facts explain the effects of cerebral cysts. In one case he had to keep a cyst drained for three years before a final cure was obtained. The ventricles can be punctured and drained without an incision, by drilling through the skull and inserting the needle of an aspirating syringe. Other speakers corroborated his statements by their experience of recoveries persisting when the membranes had remained soft.

[The same foreign mail brings us accounts of research by Chipault and Berezowsky which establish that the dura mater is able to reproduce bone, and hence that it is necessary to remove the subjacent dura mater with the bone, in trephining, to ensure a permanent opening, or, as Tuffier suggests, evert the membrane and fasten it to the pericranium. In one case he cut out the center, leaving only enough membrane for the eversion, and in another he cut four triangular flaps for this purpose, leaving an X of the membrane across the hole to prevent hernia.—ED.]

BERGMAN called attention to the "spasmophilous alterations" in the brain which some consider the foundation for all cases of epilepsy. "It is hereditary in nine-tenths of the cases, and whether congenital or acquired, bars a successful operation."

LAMINECTOMY FOR SPONDYLITIC PARAPLEGIA.

TRENDELENBURG reported that his experience with unoperated spondylitic paraplegia had been a mortality of 82 per cent. in twenty seven cases, while of eight patients operated on (one case of seventeen years' standing), one died six months later, one relapsed after temporary improvement and one was unaffected. Three are cured and two are still under treatment. In three he noted indications of inflammation in the foramen and in five there was compression of the cord from the deformed vertebræ. There was usually spasmodic paralysis and disturbances in the functions of the bladder and rectum and in the cutaneous sensibility. He resects the laminæ through a flap incision, commencing at the upper part of the hump, and continuing resecting one lamina after another until the cord is its natural color, and not bluish. The recovery may not be final until after a year. The acute stage is a counterindication to intervention.

TUBERCULOSIS OF THE SYMPHYSIS PUBIS.

BUNGNER described the symptoms caused by this rare affection as commencing with inguinal pains like neuralgia, followed by an abscess in the hypogastrium behind the muscles of the abdominal wall, leading to fistulæ in the pubic or perineal region. It has sometimes been mistaken for a hernia or lipoma. The prognosis is favorable.

TRAUMATIC COXA VARA.

SPRENGEL is of the opinion that the traumatism can be incriminated if the trouble commences abruptly and with much pain, and is unilateral. He referred to cases in which a slight traumatism had produced separation of the epiphyses, which healed in an abnormal position, shortening the limb and producing a syndrome simulating coxa vara. As the movements of the hip are hindered in most cases of coxa vara by the lack of space between the convexity of the femoral neck and the cotyloid margin, Mikulicz merely resects the projecting portion of the convexity of the neck.

INVETERATE LUXATIONS OF ELBOW.

BUNGE has treated thirteen cases with reduction by means of a couple of lateral incisions, breaking up all adherences and denuding the ends of the bones for several centimeters from the articular surface, and following with orthopedic treatment. Eight are cured. Hoffa reported success in treating habitual luxation of the patella by taking up a fold in the capsule according to Le Dentu.

PECULIAR ADHERENCES IN ILEUS.

GERSUNY stated that he found in twenty illeus laparotomies a special adherence of the mesentery between the descending colon and the sigmoid flexure, producing a volvulus or crooking the colon, with more or less complete obstruction. Seventeen were women, which inclines him to the opinion that the adherences may be caused by escaping menstrual blood, forming a fibrinous deposit at the spots least affected by the movements of the small intestine.

REHN called attention to the frequency of biliary calculi in ileus, and urged the importance of examining the gall-bladder during intervention.

CONGENITAL LUXATION OF HIP JOINT.

One session was devoted almost entirely to this subject, and the experiences related show that the hopes of a few years ago in regard to the success of manipulative reposition have not all been fulfilled. Hoffa had only three "irreproachable reductions" out of forty-two unilateral luxations (Lorenz method). In all the other cases except two there has been a forward transposition of the head of the femur, but the functional results are better than might be expected. He insists on the necessity of fastening the limb in inward rotation instead of outward, which prevents backward luxation, and recommends five months for the plaster cast. He treats inveterate cases with subtrochanterian osteotomy unless in very young subjects, in which case he induces the formation of a pseudoarthrosis. Comparing various bloodless methods, he reserves Mikulicz' slow reduction by means of a plaster cast applied every day, for a few hours, for children under 2 years. Lorenz limits the bloodless operation to children under 7, if unilateral, and under 6, if bilateral. He has a record of 360 reductions and has found the effects of treatment satisfactory in more than half the cases from an anatomic point of view. The accidents were gangrene of the member in a girl of 13, after manipulative reposition, ten fractures of the neck of the femur and two of the pelvis, paralysis of the sciatic and femoral, the latter subsiding more rapidly than the former, and three deaths, one during anesthesia and two within twenty-four hours. Reposition was impossible in twenty-two cases, all over 6. He operated on 260 subjects, with four deaths from septicemia. The ankylosis that results in persons over 10 is a great disadvantage, especially if bilateral. It occurs even in aseptic conditions, and there is also danger of a vicious growth of the pelvis.

The luxation occurred at once in fifteen cases in which the femur had been given a position too much like the normal. Lordosis disappears completely in most cases. The results have been very favorable in regard to bearing fatigue. The subjects limp for a long while, until the muscles have entirely regained their normal equilibrium. Schede and Petersen use a dynamometer in applying extension. In most of their 165 cases there is only a transposition of the head, but they have had perfect results in eight unilateral and two bilateral cases. They have been very successful with subtrochanterian osteotomy in cases of pronounced incurvation of the neck. They immobilize the upper part by a nail driven into the trochanter major, and fastened in the plaster cast. To prevent ankylosis Mikulicz advises retaining as large a cartilaginous surface as possible (see JOURNAL, p. 935).—*Semaine Méd.*, April 12, 15, 19; *Deutsche Med. Woch.*, April 13 and 20.

Orleans Parish Medical Society.

Meeting held at New Orleans, La., April 22, 1899.

HEART AND BRAIN INVOLVEMENT IN APPARENT ACUTE ARTICULAR RHEUMATISM—RECOVERY.

Dr. E. M. DUPAQUIER detailed this case. The patient was an Italian, 45 years old, of sturdy build, with an excellent personal history. When first seen, on the fifteenth day of his attack, the temperature was 102.4 F.; the right knee was inflamed and there were abarticular pains above and below the left wrist, on which was a red spot the size of a dollar. The urine was normal; the tongue was broad and heavily coated. The stomach was emptied with ipecac, the bowels with Rubinat water. Betanaphthol and salicylate of sodium (6 grams in three doses in twenty-four hours) were administered, the former as an intestinal antiseptic. An exclusive milk diet was prescribed. On the second day the pains diminished considerably and temperature fell to normal, but the third day it rose to 102.5 F., the swelling of the knee increased, the neck became stiff—a phenomenon which was then attributed to involvement of the fibrous tissues about the vertebral articulations—there was delirium, somewhat hurried respiration (30 to the minute), with a pulse of 120, weak and irregular. There was no murmur on auscultation; the heart beat was ill-defined, the sounds lacked clearness, there was pain over the precordia, the veins in the neck pulsated.

Here then were signs that might mark the beginning of endo- or pericarditis. The salicylate was discontinued immediately and four drops of fluid extract of digitalis given every hour instead. Further, counter-irritation was resorted to. For this Dr. Dupaquier prefers the actual cautery, as the most rapid and sure means of accomplishing the desired effect, making ten applications of a one half inch button over the precordia, three-fourths of an inch apart. Four hours later the cardiac signs were unaltered; the pleuræ and lungs were normal; the delirium was more marked; the eyes were injected, the stiffness of the neck had increased, and temperature was 103.

A condition of cerebral rheumatism, of congestion of the cerebrospinal meninges, was undoubtedly present; revulsives were plainly indicated; $\frac{1}{8}$ gr. tablets of elaterium were given at hour intervals until four had been taken, producing free purgation; mustard was applied to the limbs. Digitalis was kept up; water was administered freely every hour. The patient grew quiet and perspired more freely.

The same treatment was kept up throughout, especially the flushing out with fluid. For a week fully a gallon each of milk and of water was taken every twenty-four hours. At the end of the twelfth day under treatment, the cardiac, cerebral and articular symptoms were gone; slight febrile temperature existed, for which quinin, strychnin and benzonaphthol were given with good effect.

Attention was called to the necessity of dropping the salicylates on the occurrence of cerebral and cardiac complications, which are neither prevented nor cured, but are often aggravated by them.

NAUSEA IN CASE OF PNEUMONIC INFECTION.

Dr. DUPAQUIER also related this case, in which consolidation of the lower lobe of the left lung was ushered in by a chill, a rise of temperature to 104 F., and nausea, with vomiting. The nausea and vomiting were marked and persistent symptoms throughout the disease, which ended fatally. Long before the termination, tachycardia with arhythmia, albuminuria and symptoms of meningeal involvement had shown the gravity of the condition. The gastric symptoms, of central origin caused by profound hemic alteration, are of grave prognostic value when persistent and not limited to the brief period of invasion; when they occur, the prognosis should always be reserved.

ACUTE ARTICULAR RHEUMATISM.

Dr. HERMANN B. GESSNER called attention briefly to the treatment for this condition, recommended by O'Conor of Buenos Ayres, in the April issue of the *Annals of Surgery*. (See JOURNAL, April 15, p. 839, ¶ 48.)

Dr. M. J. MAGRUDER read of a girl of 8 years, who presented at the beginning pain and swelling about the shoulder with a temperature of 101. On the second day the shoulder was less painful, but the temperature higher and accompanied by headache. Higher temperature, severe head pains, sleeplessness, crying, stiffness of the neck were present on the third day. The fourth day was marked by a severe convulsion. Further details of the case were not known to him, as it had passed under the care of another physician, but he did know that the child died three or four days later with symptoms of cerebrospinal meningitis.

Dr. J. A. STORCK had, during the present year, seen several cases of rheumatism presenting cerebral symptoms and large, flabby tongues. He has used quinin salicylate and potassium bromid with good results.

Dr. E. DENEGRE MARTIN spoke of a case treated by him, in which an improvised steam bath at home had given relief after the failure of active treatment with drugs. In several other cases seen since he had been equally successful with this treatment, which gives better results than drugs, and without disturbing the stomach. He warned against subjecting weak patients to a prolonged bath, which might cause serious depression.

Dr. HAMILTON P. JONES related his own experience with rheumatism. Three years ago he spent five weeks in bed with a severe attack which involved all but the temporomaxillary joints, and was attended with fever which ranged from 103.5 to 104.5 F.; during this period he lost thirty pounds. Finally, he went to Hot Springs, Ark., where a series of thirty-five baths, associated with free ingestion of water effected a cure. Two months after his return indulgence in a single glass of beer was followed by an attack involving the knee. He then began taking steam baths daily with good results. Later he went in for Turkish baths, of which he took about 300 in a year. Rheumatism had been relieved without taking any drug but bicarbonate of sodium, and he had escaped organic lesions.

Dr. JOHN F. OECHSNER believed that physiologic rest of the joint, obtained by immobilization with splints or gypsum bandages, is of great value in the treatment of acute articular rheumatism; a case in point was cited.

Dr. J. P. CONN had immobilized the right wrist of a young woman under his care, with the result that he expected to have to give a general anesthetic in order to break up adhesions.

Dr. DUPAQUIER, closing the discussion, said that Dr. Magruder's case shows how careful we must be with such cases occurring in children. He had seen a case in which a child that had suffered with a tonsillar trouble was thought to have post-diphtheritic paralysis; in reality the child was suffering with a rheumatic attack attended with little swelling. The association of tonsillitis and pain in the joints makes the diagnosis of rheumatic disease in children. Dr. Dupaquier uses immobilization at times, but not in acute cases. As for the steam bath, it is dangerous when cardiac complications exist: death occurred in a case known to him.

Philadelphia Pathological Society.

Meeting held April 27, 1899.

AUTOINTOXICATION.

Dr. R. H. CHITTENDEN of New Haven gave an address on this subject, confined for the most part to the consideration of hypoxanthin, xanthin, adenin, allantoin, and uric acid, all of which bodies he considers have close chemic relationship, and arise during the processes of normal metabolism. Katabolic changes are characteristic of individual cells, and under normal circumstances are not important, but during disease they doubtless play an active rôle in the production of pathologic conditions. These bodies thus become of special interest to both the physiologist and the pathologist. The processes which bring about the formation of these products are closely interwoven, and a perversion in one set of cells sets up a disturbance, or causes a perversion in cells situated elsewhere. Thus a removal of the thyroid, or suprarenal bodies alters the vital power to such an extent that profound symptoms ensue, therefore, many of the normal excretory products are noxious to the body which produces them in health. Autointoxication, therefore, is a wide-spread possibility, arising from products of its own metabolism, and one within the reach of every organ, tissue, and cell within the human system. Being so, it is unicel-

lular as well as multicellular, and from this reason the processes taking place within each cell must be considered. A perversion of metabolism may result in the formation of toxic substances not common to the individual.

What evidence have we that the normal waste products are poisonous? It has been proven that some of these poisonous products may be found among the alloxuric bodies. They are all closely related chemically. Regarding their toxic properties, Minkowski gave to a dog 4 grams per body weight, the substance known as adenin, which in one case gave rise to nausea and vomiting, and in another instance caused inflammation of the kidneys and stomach. Given hypodermically it causes an increased pulse-rate. Its principal action is, however, exerted on the gastric mucous membrane. Experiments go to show that its action does not come on at once, but after an interval of several hours. Autopsies on dogs to which adenin has been given disclose considerable injury to the kidney structure, with desquamation of the epithelial cells, and peculiar spots in these organs, confined for the most part to the tubuli uriniferi, and of the loops of Henle. The interstitial tissue shows evidences of acute nephritis. The uric acid is greatly diminished. Hypoxanthin, when given to dogs in doses of $4\frac{1}{2}$ grams produced no symptoms of poisoning referable to the gastro intestinal tract. The evidence goes to show that it becomes rapidly transformed into uric acid and allantoin, the decomposition products being respectively 77 per cent. uric acid, and 4 per cent. allantoin. It remains a question whether hypoxanthin is not first changed to uric acid, and subsequently to allantoin. All experiments with these bodies fully demonstrate that a limited number of experiments may lead to false results. In all cases we should specify the animal used, owing to the difference in the tissues in man and those of the lower animals.

Guanin given to dogs in doses of 6 grams produced little results. In larger doses it is toxic. The results, however, prove that it is not converted into uric acid or allantoin, and that it is not readily transformed at all, and upon this property its toxic property doubtless depends. The body known as xanthin, while not toxic to a large extent, becomes so upon the advent of the introduction of the methyl group, such as trimethyl-xanthin, which is toxic. Given to frogs it causes rigidity of the muscles and increased reflex activity. In the dog it is changed into mono-methyl-xanthin.

Carnin, while not toxic, causes fluctuation of the heart.

One reason there is so much misunderstanding in regard to these alloxuric bodies is due to the faulty methods pursued by different experimenters. The tendency at the present time is to lay too much stress on the toxicity of these products of normal metabolic activity. In certain diseases, however, they may play a prominent rôle. The symptoms ordinarily observed in nephritis, for example, may be due to retention in the system of these alloxuric products.

Regarding the origin of urea, it appears to be chiefly formed in the liver. Its immediate antecedent seems to be ammonium carbonate, from which it appears to be derived. In the case of dogs, however, urea has been formed although the liver had been removed. As to the origin of acetone, one observer says it supervenes on the decomposition of fats. It is a product of cell metabolism and is found in large amounts in the urine in certain cases of diabetes. Acetonuria thus arises from cell perversion. Acetone is only toxic in very large amount. Diabetics fed on carbohydrates alone, or on glycerin, rapidly succumb.

The chemic products in the intestinal tract due to the life of micro-organisms, undoubtedly do cause autointoxication in many instances. It has been demonstrated that phenol, indol, and skatol, are all toxic. Indol is no doubt due to the life of the colon bacillus. Indol in toxic amounts manifests its influence on the heart, and on the liver, the latter organ showing degenerative changes. In sufficient amounts the absorption of these aromatic substances—indol, phenol, and skatol—may give rise to many symptoms occurring during the course of disease. Thus we have the production of toxins arising from faulty metabolism. It will be observed, therefore, that no one group of products arising from faulty metabolism is responsible for the production of autointoxication. Cholin will cause a fall of blood-pressure and embarrassment of the respiration.

Dr. JUDSON DALAND thinks these products of the normal body might be a prominent factor in such diseased processes as typhoid fever. He detailed certain other diseases which he had treated in which he thought that the alloxuric and other waste products had been disturbing factors. He also thinks the estimation of such bodies in the urine as indican and acetone will give us an index of the amount of other waste products being formed in the system.

Dr. F. SAVARY PEARCE spoke of a case of neurasthenia in which there had been present glucose in the urine, and on its disappearance the symptoms of neurasthenia had disappeared.

Dr. A. A. ESHNER regarded the subject as necessarily very complex. Two causes he considered as being potent, the one a deficiency of elimination, the other excessive production.

Dr. ALFRED ENGLEBERT TAYLOR has endeavored to obtain certain leucomains from the urine, but in many instances the results have been negative. In one case of pernicious anemia, however, he has been rewarded by finding putrescin and cadaverin.

Cincinnati Academy of Medicine.

Meeting of May 1, 1899.

CASE OF ANEURYSM OF THE AORTA.

Dr. G. A. FACKLER presented a man, past middle life, who had had syphilis twenty years before. He thought that the descending part of the thoracic aorta was involved, a pulsating tumor being present in the back in the neighborhood of the left scapular angle. The heart itself was enlarged, but the only murmur coming from the heart itself was a systolic bruit over the pulmonary area. The second sound at the base was accentuated. The patient had entered the Cincinnati Hospital complaining principally of hoarseness. Laryngoscopic examination showed paralysis of the left vocal cord. Tracheal tugging was not present. Dilatation of the veins over the chest was marked, especially on the left side. The lung tissues in the neighborhood of the tumor showed signs of pressure by means of numerous small crackling râles present.

Dr. A. M. BROWN recommended frequent and slight blood-letting as a remedy for sleeplessness and pain.

Dr. J. L. CLEVELAND thought that morphin would control the pain, act as hypnotic and at the same time act as a cardiac stimulant.

Dr. LOUIS SCHWAB, coroner, spoke of the cases of sudden death coming under his official experience within the past few weeks, both of which cases had died of ruptured thoracic aneurysm without external signs, and in one of which foul play might have been suspected without an autopsy. He thought that in every case of sudden death an autopsy should be made to determine the underlying cause of death.

Dr. WM. JUDKINS spoke of the rôle of excessive bicycle riding as a cause of aneurysm.

Medical Association of Georgia.

Annual Meeting held at Macon, April 19-21, 1899.

(Concluded from p. 999.)

ETHER VS. CHLOROFORM.

Dr. WILLIAM H. ELLIOTT of Savannah pointed out in his paper the chief danger in the administration of chloroform as paralysis of the heart, the risk being greatest at the beginning of the inhalation; the more concentrated the vapor, the greater the danger.

In ether, on the other hand, the chief dangers are not during the inhalation, but after, and come in the form of respiratory or genito urinary complications, especially suppression, and occasionally there is unaccountable collapse. Should a fatal result ensue, it would be more likely to be charged to disease than to the anesthetic.

To sum up: He is satisfied that chloroform is the pleasanter, quicker and more satisfactory anesthetic. He thinks most of the dangers can be avoided by the skill and care of an administrator who realizes that anything which can put to sleep, can kill. To the careless or inexperienced he would recommend ether. Some years ago, at a meeting of the National Association of Railway Surgeons, a test vote was taken on the subject of anesthetics. The question came up by chance and the attendance at the moment was not large. The vote resulted in sixteen in favor of ether, and 100 in favor of chloroform.

ADMINISTRATION OF ETHER AND HOW TO MEET ITS DANGERS.

Dr. SAMUEL C. BENEDICT of Athens followed with a contribution in which he reviewed the methods of administration and later discussed the proper way to meet the dangers to the patient arising from such administration so as to guide him to a safe awakening.

TECHNIC OF RECTAL EXAMINATION.

Dr. JAMES P. TUTTLE of New York delivered an address (by invitation) on this subject. Among the symptoms which suggest rectal examination, he called attention to the following: 1. Vague pains or aching about the pelvis, sacrum, or coccygeal region and shooting down the left leg. 2. Flatulence, with

indigestion, loss of appetite, and irregularity, or constipation of the bowels. 3. Tendency to diarrhea, especially in the morning. 4. Sense of constriction or weight about the pelvis. This is especially important in males. 5. Spasmodic or periodic dysuria without adequate cause in the genito-urinary apparatus. 6. The presence of mucus, pus, shreds, or blood in the dejections. 7. Irregular menstruation or dysmenorrhea, especially in young women and school-girls. 8. Picking of the nose, scratching of the abdomen, restlessness at night, and constipation in young children.

Before the actual examination of the rectum is begun, certain subjective symptoms should be inquired into and their suggestions as to the probable cause he borne constantly in mind. Among these may be mentioned:

1. The habitual state of the bowels—whether regular, constipated or diarrheal. If constipated, is the stool, when it appears, soft and consistent, of normal shape, tape like, or hard and ball like? Is it clean or covered with mucus or tinged with blood? If diarrheal, is it watery, free and painless, or scanty mucus, and attended with pain and subsequent exhaustion?

2. Pain—when does it occur, at, before or after stool; how long does it last; what is its nature—acute, cutting, burning or a dull ache? Where is it experienced—at the anus, the sacral region, about the pelvis, in the inguinal region, or shooting down the leg, or is it, as often happens, in the uterus, neck of bladder or urethra?

3. Itching and spasmodic twitching of the sphincter.

4. Discharge—what is its character—bloody, mucous, watery, purulent, or fetid? Is it alone or mixed with fecal matter? When does it occur, at, before, after, or independent of the stool?

5. Protrusion—when does it occur; is it brought on by long straining or upon slight exertion; is it pronounced; does it disappear spontaneously, or is it difficult to restore; is it hard or soft, smooth and general, or localized and nodular? If down at the time of the examination, the direction of the rugæ, whether circular or running up and down, should be carefully observed, as in these we have the pathognomonic distinction between complete and partial procidentia.

6. What are the habits and history of the patient? Has there been much use of enemas; is he in the habit of sitting long at the shrine of Cloacus, with his pipe and paper as companions; is there an unsatisfied sensation after stool, a feeling of something more to come away; is he the victim of pederasty; has he a history of gonorrheal or syphilitic infection; or has he hereditary tendency to tuberculosis or malignant disease?

Dr. Tuttle then described, in detail, methods of examination and treatment of various diseases of the rectum, and if they be systematically followed out by all physicians, intractable and incurable rectal diseases would soon become things of history instead of nightmares to the profession.

ALBUMINURIA, INCLUDING ORIGINAL INVESTIGATIONS, AND ITS RELATION TO DISEASES OF THE EYE.

Dr. ALEX. W. STIRLING of Atlanta read a paper dealing with the relationship of albuminuria to eye diseases, saying that in this the oculist first and chiefly considers albuminuric retinitis. It would be a great oversight to entirely omit other affections which are equally closely related to it and are dependent on the same cause. They may very well be divided into those which depend on lesions of the visual apparatus: 1, outside the brain, among which is albuminuric retinitis itself; and 2, within the brain. Among the former are edema and hemorrhage into the lids and conjunctiva; hemorrhage into the optic nerve and into the orbit. Embolism or thrombosis of the central vessels of the retina is probably less uncommon than has been supposed. Iritis and cataract are probably little if any more common in albuminurics than in the general population.

Among intracranial lesions, hemorrhage into the nuclei, or trunks of the nerves supplying them, has been said to produce temporary paralysis of some of the external muscles of the eye. Uremic amblyopia is more frequently met with. It is probably the result of extreme cerebral anemia due to vascular contraction, caused by the irritation of poisonous matters in the circulation. The resulting blindness usually affects both eyes, and may be incomplete and transient, or absolute, vision returning only after some hours' duration, though it may be delayed for three or four days. The pupils generally react to light, which indicates the cortical origin of the attack, but occasionally they do not, and then the nerve or optic ganglia are involved. In these latter cases the optic disc is likely to be found swollen. When recovery of vision does not fully take place, there must be some organic lesion, and post-mortem examinations have shown that apparently functional cases have sometimes had their origin in small hemorrhages. It should also be noted that central amblyopia is not infrequently accompanied by other nerve symptoms, such as hemiplegia.

ACUTE OBSTRUCTION OF THE BOWELS.

Dr. F. W. MCRAE of Atlanta contributed a paper on this subject, to appear in the JOURNAL.

REPORT OF TWO INTERESTING CASES.

Dr. W. D. TRAVIS of Covington presented this report, which will also appear in the JOURNAL.

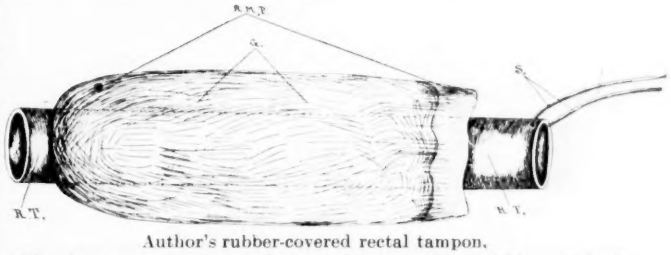
The following officers were elected for the ensuing year: President, F. W. McRae, Atlanta; vice presidents, St. J. B. Graham, Savannah, and H. B. McMaster, Waynesboro. Atlanta was selected as the place for holding the next meeting, the third Wednesday in April, 1900.

New Instruments.

A New Rectal Tampon.

BY J. RAWSON PENNINGTON, M.D.
CHICAGO.

The success of a rectal operation depends quite as much on the dressing and after-treatment as on the operation itself. My purpose is to call attention to the construction and application of a rectal tampon which, so far as I know, is new. I have observed that one of the principal sources of pain after operations for hemorrhoids is the protrusion and swelling of small tabs of skin after the ligature, or the cauterized surfaces after the clamp and cautery, has been used. This post-operative complication can be prevented to a great degree by the skillful application of a properly constructed rectal tampon. Where it is properly applied, anodynes are rarely necessary. It not only lessens pain, but is one of the best possible protections against hemorrhage. It also provides for rectal drainage, and is one of the best dressings that can be applied.



Author's rubber-covered rectal tampon.

The tampon may be made by taking a piece of $\frac{5}{8}$ or $\frac{3}{4}$ inch rubber tubing (RT) about $4\frac{1}{2}$ inches long, depending on the condition in the case, and attaching a string (S) for anchorage to the distal end. A sterilized male rubber pouch—condom—(MRP) after the closed end has been cut off, is tied near the rectal end. The tube is then wrapped with sterilized gauze (G) or cotton until it is as large as desired. The rubber pouch is then pulled over this filling, which completes its construction.

To insert the tampon, a bivalve speculum is introduced into the rectum, opened, and the tampon pushed into position between the blades. The speculum is then removed, when the rectal walls adjust themselves snugly to it.

Among the many advantages over the gauze-covered tampon are:

1. It is neater and cleaner.

2. There is but little or no pain on its removal, as the granulations can not penetrate or adhere to the rubber wall as they do the gauze.

3. The tender granulation sprouts are not interfered with or broken off during its removal, hence little or no hemorrhage, thereby leaving the wound better fortified against septic infection, and the healing process is greatly enhanced.

4. Defecation is also much less painful.

Every surgeon doing much rectal work knows that in removing rectal tampons covered with gauze the pain is most excruciating; that all manner of injections and soakings are resorted to to lessen this pain, but with little or no effect.

Besides, the tender granulation sprouts are broken off during its removal, thus causing the wound to bleed, and sometimes quite profusely or even dangerously. This not only renders the wound more liable to septic infection, but retards the healing process, which lessens the chances for a perfect result.

It is important that the rubber be of a reliable make. The goods I use are made by the Miller Rubber Co. of Akron, Ohio.

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SATURDAY, MAY 13, 1899.

RELATIONS BETWEEN ALIMENTARY AND DIABETIC GLYCOSURIA.

There is considerable contrariety of opinion as to the significance of glycosuria as it appears variously in relation with the taking of certain foods, the use of certain drugs, exposure to certain gases, the coexistence of definite disease of brain, pancreas and liver, and finally apart from any appreciable textural or organic alteration. Glucose in appreciable amounts can scarcely be looked upon as a physiologic constituent of the urine, and its appearance must be considered as evidence of a defect in metabolism, and its transiency or permanency and its association or not with other phenomena of greater or less gravity, will constitute an index of its significance. If we were asked to attempt a distinction between glycosuria and diabetes, we would base it on the analogy between albuminuria and nephritis. The one is a symptom of the other, a most distinctive symptom it is true, but it may exist independently. It is an interesting question whether this independence is a matter of degree rather than of quality, and many attempts have been made to furnish a satisfactory reply. Some have held that, excepting toxic glycosuria and the lactosuria of gravid and nursing women, the appearance of sugar in the urine following the ingestion of starch may be viewed as diabetic, unless special conditions have been operative, such as high temperature, deficient elimination of heat, cessation of muscular activity; while on the other hand the appearance of sugar in the urine after the ingestion of glucose, may be, but is not necessarily, a sign of abnormal carbohydrate metabolism. In an endeavor to determine whether such a distinction could be maintained, STRAUSS, an assistant in the clinic of Professor NOORDEN at Frankfort (*Berliner Klin. Woch.*, March 27, p. 276), undertook a systematic study of the reaction to equivalent amounts of grape sugar and of starch displayed by persons who had manifested a tendency to alimentary glycosuria after the ingestion of sugar.

In eight of eleven cases alimentary glycosuria followed the ingestion of starch as well as of sugar. Four of the eight were in alcoholics, still in the stage of acute intoxication; one was in an imbecile; and three presented pneumonia. As a rule, the amount of sugar in the urine was less after the ingestion of starch than after that of glucose. Exceptionally, the conditions were reversed, as when the administration of starch coincided with augmentation of the tendency to alimentary glycosuria. In two cases of pneumonia, one of influenzal origin, the other of croupous type, glycosuria was induced by the administration both of sugar and starch, and was attributed to the febrile infection.

It was found that in individuals with a transient tendency to alimentary glycosuria this tendency was of shorter duration following the ingestion of starch than following the ingestion of sugar. Individuals predisposed to alimentary glycosuria suffered, with relative frequency, a diminution in their tolerance of carbohydrates after abundant ingestion of such substances. In no case were the limitations of glucose assimilation increased when the injurious influences capable of diminishing the tolerance of carbohydrates were no longer manifestly operative.

Alcoholics, so long as they were under the direct influence of alcohol, were found largely predisposed to alimentary glycosuria. In four cases of chronic alcoholism, spontaneous glycosuria, that is upon a mixed diet, was observed coincidently with renewed indulgence in alcohol. In none were there any symptoms indicative of delirium tremens, while in all glycosuria appeared in the stage of intoxication. In three the glycosuria was ephemeral, while in the fourth it persisted for three or four days with a mixed diet rich in amylaceæ. In a fifth case ephemeral spontaneous glycosuria was a probable result of alcoholic intoxication. In one case it was possible by the administration of large amounts of alcohol to revive the disappearing tendency to glycosuria upon an amylaceous diet. In only a portion of the cases of alcoholic intoxication in which the urine was free from sugar could glycosuria be induced by administration of starch or glucose. An alcoholic and epileptic whose urine was free from sugar after convulsive seizures exhibited glycosuria on the following days upon administration of glucose while under the influence of alcohol. In cases of persistent alcoholism the activity of carbohydrate metabolism appeared to grow progressively less.

The important practical question is raised whether

in any considerable proportion of cases the alimentary glycosuria may be looked upon as a precursor of true diabetes mellitus, and the answer is based upon extensive empiric evidence. Such a relation is thought not to exist, as alimentary glycosuria is the mildest manifestation of diabetic glycosuria and for this reason offers hope of being kept stationary, of remission and of definite disappearance. From a prognostic point of view a distinction is to be made between individuals who exhibit alimentary glycosuria as a result of temporarily acting injurious influences and those who in consequence of permanent derangement of their capacity for assimilating carbohydrates are permanently predisposed to alimentary glycosuria. The former are free from suspicion of future diabetes, whereas the possibility of development of diabetes in the latter must be kept constantly in mind, especially when alimentary glycosuria follows not only the ingestion of sugar, but also that of starch.

RATION OF THE UNITED STATES NAVY.

Adversity is not without benefit to man in whatever condition of his environment. The lesson may be bitter, but all the more effective and enduring for the scars that remain. The holocaust of the Windsor Hotel in New York awakened the community to a realization of the danger to life concealed by luxurious appointments; and the revelations of the character of the food imposed on the Government in the late war have attracted attention to the subsistence of soldiers and sailors that no amount of dispassionate appeal by the sanitary officers could ever have accomplished. Whatever the explanation of the evidently objectionable food—for which, if thorough investigation fixes the responsibility, due process of law should promptly bring condign punishment—the profession at large and especially the officers of the medical department are now concerned in knowing definitely what should constitute a soldier's ration. The question is in a measure simplified by the experience of the sister service. There is no complaint of insufficient or unfit food in the navy. "Jack" has always had enough to eat, and when the ship's cook is expert, the officer-of-the-deck makes his inspection so thorough as to extemporize a luncheon, and, on expeditionary service, officers and men are fed contentedly from the same allowance. The naval requirements, however, are such that provision has to be made for service in every climate. The vessel that starts for the Pacific Station may go to Behring's Sea or Samoa; commissioned for a cruise in the Mediterranean, she may enter the ice-bound Baltic or skirt the coast of Africa and summer at Loando—or she goes through the Suez Canal to Ceylon and Manila and returns home around Cape Horn. Wherever called she carries her provisions with her, and the ration is elastic enough to meet whatever emergency. Variety is obtained by alternative substitutes; the quantity is the maximum. No sailor need ever leave the mess-table hungry. Probably no individual ever consumes the whole allowance, and hence the messes are permitted to commute a certain percentage—to the extent of not more than one out of every four men in each mess of enlisted men—of the rations to which they are entitled, for the purchase of fresh meats, vegetables and fruits whenever in port. Through the courtesy of the bureau of subsistence, the following statement of the components of the ration shows their variety. There are in fact *four* distinct rations, to-wit: No. 1. Salt pork, or fresh meat, or preserved beef, with beans or peas, or fresh vegetables of equal value, or rice. No. 2. Salt beef, or fresh meat, or preserved meat, with flour and dried fruit, or fresh vegetables of equal value. No. 3. Preserved meat with butter and rice, or beans, or peas, and desiccated mixed vegetables, or canned vegetables. No. 4. Preserved meat with butter and desiccated tomatoes, or canned tomatoes. Biscuit or soft bread, flour and rice, tea or coffee, and cocoa, and sugar are issued daily, with a weekly allowance of pickles, molasses and vinegar. Of these four rations, which have been established by law and promulgated in the circular of the paymaster-general of the navy, and approved by the secretary of the navy, Nov. 15, 1884, *eight lawful variations* are permitted, and meet every requirement. "Dried fruit may be either dried apples, peaches, raisins, currants, prunes, figs, dates or any other. Preserved meat comprises roast or compressed beef, Chicago corned beef, fresh mutton or any other canned preserved meat, ham, bacon, sausage, salt fish, and any other salted or smoked, preserved meat." "The daily allowance of fourteen ounces of biscuit (hard bread) can be varied by the substitution of one pound of soft bread or one pound of flour—may be either wheat, rye, corn meal, oatmeal or hominy—or one-half pound of rice," and "the daily allowance of two ounces of coffee may be varied by the issue of one-half an ounce of tea or two ounces of cocoa."

The naval ration has the approval of the medical officers of the navy, but it is purchased, inspected and issued by the bureau of subsistence and accounts, which combines the several functions of three departments in the army—subsistence, pay and quartermaster's—and notwithstanding this triple care and responsibility, no question has ever arisen as to the satisfactory performance of all these duties. The admirable system of rigid inspections and the prompt condemnation of improper articles are believed to explain the freedom from objection of the navy ration. The selection of the special variety of food items for the occasion of climate or other cause is authorized by the commanding officer, after consultation with the pay officer and upon the advice of the medical officer. In general terms, the three essential considerations are: 1, the supply of unexceptionable articles of food—unquestionably *good* meat, *good* vegetables,

good bread; 2, the judicious adaptation of these elements to climatic conditions; and 3, the proper preparation of food items for consumption.

The board of army medical officers, Colonel WOODRUFF, Lieutenant-Colonel SMART and Major CRAIG, likewise found the authorized army emergency ration to fulfil all the requirements of the system for the limited period for which it was devised and, suitable as well for the Antilles and the Philippines as for the United States, the quality of the articles—hard bread, bacon, pea-meal, coffee or tea, salt, pepper and tobacco—being the prime consideration. In the navy this is secured by the rigorous system of inspection, both at the time of receipt and of issue. New combinations, professedly aiming at greater nutritive value, patent processes of preservation and cheapness to the government, are of less concern in the aim to obtain good food and have it properly prepared. The well-fed man, private or officer, fights better, resists climatic influences, remains well and vigorous, and recuperates more rapidly from disease or injury, than the enfeebled, dispirited dyspeptic, who, if he lives, becomes a chronic pensioner upon the government, and entails an infinitely greater ultimate expense than the cost of good food, whatever it be at the outset.

SUSCEPTIBILITY OF THE ENDOCARDIUM TO INFECTIOUS PROCESSES.

One of the earliest facts learned by medical students is that rheumatism and scarlet fever are exceedingly prone to produce secondary changes in the endocardial covering of the valves of the heart, and while physicians universally recognize this fact, which they have learned early in their medical career, we fear that too frequently they fail to recognize the additional fact that other micro-organisms than those which produce these two maladies are not rarely the cause of marked endocardial change.

Recently THAYER and BLUMER reported a case in which pure cultures of the gonococcus were found in the valves and blood. Cultures taken during life showed colonies of the gonococcus, which would indicate that the blood-stream affords a favorable course for the transmission of these organisms from one part of the body to another. This fact is all the more interesting because it is well known that while septic infection of the entire body may occur, it is often impossible to obtain infecting micro-organisms from the blood when they may be readily obtained from various organs of the body. COUNCILMAN and others have reported similar cases.

Still more recently BERG has reported a case (*Medical Record*, April 29) of pyelonephritis and ulcerative endocarditis occurring as a complication of gonorrhea, the gonococcus being found in pure cultures upon the diseased heart-valve. In this interesting paper of Dr. BERG's may be found a number of references to this very important subject, and the interesting fact is pointed out that in most cases where a heart lesion has been found complicating gonorrhea, this lesion has been preceded by gonorrheal arthritis, probably not because the development of an arthritis was but a step toward endocarditis, but because the tissues of the joint and endothelium lining the heart are tissues peculiarly prone to infection. At first it was thought that these cases of endocarditis complicating gonorrhea were really due to a mixed infection, but careful observation by trained bacteriologists, working with the more recent methods, has proved, as it did in the case reported by Dr. BERG, that the gonococcus itself is quite capable of producing this grave cardiac lesion.

Not only may a disease which is largely localized in its character, as a rule, produce such wide-spread damage as that which we have just named, but other maladies producing a more general infection, yet chiefly limiting their activity to one portion of the body, often do likewise. Thus, as has recently been pointed out in Dr. H. A. HARE'S little book on the "Medical Complications and Sequelæ of Typhoid Fever," acute endocarditis may arise during the course of this disease as the result of direct infection of the endocardium by the bacillus of EBERTH. CARBONE reported a case of this character as long ago as 1892, in the *Gazetta Medica di Torino*, in which a young woman with the classic symptoms and lesions of typhoid fever suffered from an endocarditis, the typhoid bacilli being found in her endocardium, and cultures of this bacillus, when injected intravenously into various animals, produced the same lesions in their hearts.

Not only may the endocardium be attacked by the bacillus of EBERTH, but it is also a matter to be recalled that RATTONE found the bacillus of EBERTH in pure culture in the arterial walls of four cases of typhoid fever, and that HAUSHALTER and VAQUES have also found the bacilli in the walls of the veins.

HYDROCEPHALUS AND HYPOPLASIA OF THE ADRENALS.

In the absence of any well-founded hypothesis as to the cause of hydrocephalus, and the futility of the examinations of the hydrocephalic brain for the purpose of explaining this condition, CZERNY[1] injected solutions of Berlin blue into the cerebral ventricle of young rats, and watched for the first place at which the solution emerged from the cerebrospinal canal. He observed that the color first appeared in a lymph-vessel which sends a branch to the adrenals, and then leads to the lymph-glands of the pelvis. This led him to investigate the condition of the adrenals in hydrocephalus.

In five cases he found that the adrenals were macroscopically quite normal. Microscopically, however, he found to his great surprise, that in every

[1] Centralblatt für Allg. Path., etc., Bd. x, 1899.

case there was a complete absence of the so-called medulla of both adrenals. The cortical layers were separated from each other only by a few large veins. In order to avoid mistakes, he examined the adrenals of twenty infants with normal central nervous system, with the result that in all the cases both adrenals were found to contain the usual amount of characteristic medullary substance. Retrogressive changes and remnants of such were not demonstrable in the adrenals of the hydrocephalic infants, and CZERNY therefore regards the conditions as due to anomalies of development.

The literature does not, according to CZERNY, contain any reference to such changes in the adrenals in hydrocephalus, and this he attributes to the fact that LOMER and WEIGERT, and others who have examined the adrenals in hydrocephalus, neglected to make microscopic sections. The condition of the adrenal in hydrocephalus, according to CZERNY, does not, as already stated, lead to any very marked diminution in the size of the organ, such as would be readily recognized with the naked eye.

CZERNY is therefore inclined to believe that these changes which he finds in the adrenals in cases of hydrocephalus permit the inference that there must be a certain relation between the two pathologic conditions, and while the degree of hydrocephalus in his five cases varied in the widest possible limits, the adrenals always presented the same changes, namely, an arrest in development, which must have taken place much earlier than the beginning of the accumulation of fluid in the ventricles of the brain.

It is quite evident that subsequent investigations must establish the degree of constancy between such changes in the adrenal and hydrocephalus. The animal experiments which first led CZERNY to investigate the adrenals do not seem as yet to have furnished him with any evidence of direct communication between the lymph-vessels of the adrenal and the ventricles of the brain, and whether such communication should be found to exist is of any essential importance, as regards the outflow of cerebrospinal fluid under conditions of increased pressure, would also be a problem for further study.

RATES TO THE COLUMBUS MEETING.

By reference to the "Association News" in this issue and in previous issues of the JOURNAL (see pp. 843 and 1012) it will be seen that for a large part of the country a one-fare rate for the round trip has been arranged for by the committee on transportation. The Central Passenger and the Western Passenger Association have each granted a one-fare rate for the round trip, with the exception that the latter, that is, the Western Passenger Association adds $2 to each ticket. The territory covered by the Central Passenger Association is practically that bounded on the east by a line drawn from Toronto through Buffalo and Pittsburg; on the south by the Ohio River, including towns on both sides of the river; on the west by a line drawn from Chicago to Burlington, Iowa, and the Mississippi River between Burlington, St. Louis and Cairo. The Western Passenger Association includes practically all the points west of this to Colorado, but these rates will apply from Utah. We presume that the same rate will apply from the Pacific Coast, but we have no definite authority for this statement. On the whole, the committee on transportion and the AMERICAN MEDICAL ASSOCIATION are to be congratulated on these rates, for while a part of the territory has only been granted a one and one-third rate, still the great bulk of it has been given the half rate.

STATE OF THE VERMIFORM APPENDIX IN TYPHOID FEVER.

According to the Swiss correspondent of the *Lancet*, Fräulein Hoffenhausen details in a graduation thesis the results of a histologic study of the vermiform appendix in thirty fatal cases of typhoid fever. In most instances the appendix exhibited changes similar to those present in the large intestine—principally inflammation of the mucosa, with cellular infiltration. Less commonly specific lesions were found, but not of sufficient intensity to occasion pronounced or characteristic symptoms.

PHILADELPHIA PARADES AND PRACTITIONERS.

The *Philadelphia Medical Journal* enters a protest against parades, especially when they block traffic for three-quarters of an hour, as was the case in Philadelphia the day the GRANT statue was unveiled. The editor says he is not opposed to parades, per se, but speaks in the interest of the poor unfortunate who must stay in bed and suffer while the soldiers and bands march on. These invalids require attendance, "doctors must be on the go; consultations must be met; hospitals must be visited; operations must be performed and women must be confined." While we agree with the *Journal* that these parades are a nuisance under such circumstances, and that an opening should be made for physicians when making urgent calls, still we can not help suggesting to our confrère that he might find a remedy by going to some city where the people are not so slow in their movements.

A LAYMAN'S VIEW.

Once in a while the newspapers take a common-sense view of medical affairs. Referring to a recent verdict in the courts of Chicago, which has been mentioned in these columns, the Columbus, Ohio, *Press-Post* editorially makes the following just comments: "The allegations of the petition filed against the surgeons who used the Röntgen ray were that the ray set up decomposition in the tissues through which it passed. In the face of a strong array of witnesses—scientific men—who declared that the result in the case was the direct development of disease in the ankle prior to the use of the Röntgen ray, and that so far as known definitely the new light never had

such deleterious effect on the tissues of the human body, the jury awarded the plaintiff $10,000 damages. This verdict is the decision of men who are not scientists and is against the weight of evidence of men who are. For this reason the verdict is likely to be set aside in the higher courts. It seems hardly fair, moreover, to give such a verdict to a man who voluntarily submitted to treatment by a scientific discovery that is still in its experimental stage, even though he did suffer severely as the direct result of it."

INCREASE OF CANCER.

The statements made by Prof. ROSWELL PARK, Buffalo, N. Y., in a paper published a short time since in the *Medical News*, in reference to the progressive and rapid increase of cancer in this country, would not seem to be borne out by recent statistics furnished by the health department of New York City. According to the official figures reported by the department, there were in the first quarter of the year 1899 (thirteen weeks) 503 deaths from cancer, an average of 38 9/13 per week, while in the second quarter of the year 1898 there were 511 deaths from the disease, an average of 39 4/13 per week. Instead of an increase, therefore, there was an actual as well as a relative decrease in the deaths from cancer, the estimated population of the city on April 1, 1899, being 3,550,053, against 3,438,899 on Oct. 1, 1898. The maximum mortality from the disease in any one week during the first quarter of 1899 was 50 deaths, in the week ending March 25, and the minimum, 27, in the week ending January 28. The maximum mortality during the second quarter of 1898 was also 50, in the week ending July 30, and the minimum, 33, in the week ending September 17.

"A NOTED DIVINE" AND "CHRISTIAN SCIENCE."

There is so much of the solemnly serious and dreary drudgery in this life of ours that when something funny happens, it is as the oasis to the weary traveler crossing the dreary desert. These funny things give one courage to go ahead in the grand work of living, and make one realize that this is not so bad a world after all. These exuberant thoughts are called forth by reading a heavy editorial in the *Indian Medical Record*, on "Christian Science." While the editorial is logical, full of sound reasoning, common sense and all that, the funny part comes at the close, when the editorial writer quotes "a noted divine, the Rev. JOHN ALEXANDER DOWIE of Chicago," who criticizes "Christian Science" in most scathing terms, charging that it is antichrist, unchristian, unscriptural, self-contradictory, illogical, absurd and mercenary to the very core. While this is very funny, how much more funny would it be to see the editor in question when he finds out who this "noted divine"—DOWIE—is. Evidently Eddyism is better known in India than Dowieism, hence the *Record* is excusable. The fable of the pot calling the kettle black isn't "in it" with DOWIE and EDDY fighting it out. We shall watch our foreign exchanges with interest to see what the noted "divine," Mother MARY MASON BAKER GLOVER PATTERSON EDDY, has to say about DOWIE. The "Phrenopathist," the "Rational Mind Curist," the "New Thought" healer, the "Spiritual Healer," the Dowieist, the Eddyist, *et hoc genus omne*, are calling each other names to such an extent that there is danger the people who are believing in these things will get their eyes open, and have courage to speak the truth and say "What fools we mortals be!"

PROCTOLOGISTS.

We are at a loss to know whether or not to feel offended at this sarcastic reference to one of our young societies by the *British Medical Journal*. In its issue for April 29, under the caption "Specialism in the United States," it says: The development of medical specialism in the United States suggests that in that enlightened republic a condition of things may in time be brought about like unto that which prevailed in ancient Egypt, where the human body was, as it were, pegged out in claims, each of which was allotted to a particular class of specialists. Among the most recent indications of this tendency may be noted the formation of an "American Association of Proctologists," which is to devote itself to the cultivation of rectal surgery, a field which it appears has been "very much neglected by the physician and the general surgeon." This interesting body is convened for the first time to debate *circa ardua recti* at Columbus, Ohio, during the forthcoming annual meeting of the AMERICAN MEDICAL ASSOCIATION. A body whose scientific enterprise extends somewhat higher is the American Gastro-Enterologic Association, which will hold its second annual meeting in Washington on May 2, immediately after the meeting of the Association of American Physicians.

HEALTH IN MICHIGAN.

The president of the Michigan State Board of Health, in his biennial address, reviews the work of the board and dwells with excusable pride on the record it has made and the standing it has acquired in the estimation of sanitarians. While some useful lines of work have had to be discontinued for lack of funds, in the main the board has gone steadily on in its operations and its results have not decreased. The health of the people has steadily improved, the death-rate for 1898 being only 12.5; and the vital statistics of the State show a constantly diminishing number of deaths from nearly all of the communicable disorders. While not all of this can be charged, perhaps, to the labors of the board, it is nevertheless entitled to much the largest portion of the credit. It is gratifying to note that since the board began its active campaign against consumption six years ago there has been a reduction in the death-rate of 11 per cent. from this cause. The board was the pioneer in this work and now other States and municipal bodies are taking up the matter, and hospitals for consumptives are being built and inspection of foods liable to convey the disease is beginning to be compelled. In

Michigan these measures are yet to be enforced by law and the State board of health is now advocating the passage of laws in the legislature to this effect. The reduction in the tuberculosis mortality is credited largely to the leaflet sent out first in 1891, and to the other educational influences emanating from the board. These may be greatly increased and the reduction in deaths from this cause be made still greater by the passage of the bills now advocated.

STATE SCHOOL OF HEALTH.

The daily press has announced within the last week or two the proposition to establish at the University of Illinois a course in public medicine similar to that already inaugurated in the State of Ohio. It has also stated that every health officer in the State would be compelled by law to take the course at the beginning of his term of office. It does not appear, however, that this last statement is authorized, as no legislation requiring such a compulsory course has been enacted. The attendance of health officers would be, for the present at least, entirely a voluntary matter. It is true that such a course has been recommended or suggested by the State board of health and it is quite possible that it may be inaugurated in the near future, following closely, it is probable, the line of work of the similar course in Ohio. If municipalities can be induced to require their health officers, many of whom are uninstructed laymen, and still others physicians who would be more efficient for a little addition to their special knowledge in this department, to take the course or show certificate of qualification from the school, much good would be done. At present, there is a large amount of unnecessary and harmful ignorance on these subjects, and this may sometimes be found in the holders of official positions.

THE DISPENSARY ABUSE.

The Governor of the State of New York has signed a bill, which therefore becomes a law, and it is to be hoped that it will help to prevent one of the well-known abuses of medical charity. It provides that all dispensaries shall be incorporated and governed by rules and regulations framed by the State board of charities, by which body they shall be controlled. Each dispensary must have a license and must properly guard against unworthy applicants, any violation of this rule on the part of the dispensary or its patients being made a misdemeanor subject to a fine of from $10 to $250. Such a law properly enforced will be of inestimable service to the profession, and indirectly to the public in enforcing a better standard of self-respect upon those whose example is at present demoralizing. When millionairesses can take advantage of charity without rebuke, what can be expected of those less wealthy, who follow their example. Justice to genuine objects of charity, to put it in a purely disinterested way, requires that they should not have to wait or perhaps lose their chances of relief by the crowding in of those who ought to go elsewhere. According to an editorial in the Brooklyn paper, the New York free dispensaries are a regular resort for out-of-town patients who are thus able to spend the money for a railroad trip that ought to be paid to their local physician. According to this paper's informant, a score of dispensary patients come daily from towns along one single line of railroad. Undoubtedly similar conditions exist in the vicinity of other great cities. As members of the medical profession we must not forget that in a measure we are ourselves responsible for these abuses. The multiplication of dispensaries has not always been a pure charity on our part, it has been too much the result of a demand for clinic material in our over numerous medical schools. A law like that in New York, thoroughly and impartially enforced, might disturb some of these institutions but it would be none the less a blessing to our profession.

THE BATTLE OF THE CLUBS.

The "Battle of the Clubs" has been almost a standing head in the London *Lancet*, to such an extent has the medical benefit society movement permeated English society. Here we have less of the evil, for evil it is both to the profession and the public, but it nevertheless exists. One of the latest evidences of its existence we notice in a paragraph in the *New Yorker Medicinische Monatsschrift* for April, quoted from a German-American drug journal. It says: "A still more striking case of the low estimation of the medical profession is afforded by the Manhattan Medical Service Company. For the sum of $2 a year any person between 15 and 45 years of age can partake of the benefits of this society. These consist in the privilege of obtaining an office prescription of the company's physician on the payment of 25 cents, which will be put up without further cost by the company's druggist. The physician receives only 7 cents out of the 25, while the druggist pockets 18. In surgical cases the physician gets 15 cents, but must himself furnish the plasters and bandages. If the patient is bed-ridden, the society's district physician will attend him or he can be received in its hospital." The estimation of the value of an office consultation and prescription at 7 cents is low enough in all reason, and the question arises, does not this come under the new dispensary law of New York State, or is it an attempted evasion of it? In any case, it would be well for some physician who has the honor of the profession at heart to call the attention of the State board of charities to this rank undervaluation of professional services. It is, perhaps, only one of the bad results of the overcrowded state of the medical profession, due to a suicidal overproduction of physicians, a malignant proliferation of both teaching and student elements in medical education.

EPILEPSY WITH LESION OF UNCINATE GYRUS.

One of the greatest sources from which we derive physiologic knowle lge of the cerebral cortex is from the varied convulsive phenomena of epilepsy. The symptoms that give us the strongest aid toward defining cerebral function are the aura and the order of muscular invasion of an epileptic fit. An illustration

of the great interest to be derived from the study of such matters is well displayed in the case of epilepsy reported in the winter number of *Brain*, by JACKSON and COLMAN, in which there was a fairly constant tasting movement and "dreamy state" in the epileptic fits, which at times constituted the entire attack. At autopsy a very small patch of softening in the left uncinate gyrus was found. Champing movements of the jaws, and an appearance of tasting are seen in mild epileptic fits, and in fact may constitute the entire attack of epilepsy in rare instances. But few of these cases have shown the result at autopsy that JACKSON and COLMAN report. No lesion was found in their case except in the left uncinate gyrus, which is FERRIER'S taste region. As far as the observers' report goes, it appears that the epileptic phenomena preponderated on the right side. JACKSON and BEEVOR also recorded a similar case in 1889, which presented a tumor in the right temporosphenoidal lobe. JACKSON placed on record a very suggestive class of epilepsies known as uncinate group of fits, in the *Lancet*, Jan. 14, 1899. It is a matter of extreme regret that this case of epilepsy of the taste region did not come to autopsy early enough to get the specimen in proper preservation for future microscopic study.

INFLUENCE OF TYPHOID FEVER ON EPILEPSY.

There are very few subjects of greater interest than the influence of acute infectious disorders on chronic disease processes. That this influence is often a very positive one is well known to every physician of large experience in the treatment of acute and chronic maladies, and it is also a well-known fact that an attack of acute infectious disease often results in the development of some chronic pathologic condition. In the *Revue de Médicine* for February 10, 1899, DIDÉ has contributed an interesting paper upon this subject in which the well-known fact is pointed out that the oncoming of an infectious disease often produces convulsions of an epileptiform character, and on the other hand that the development of an acute infection may indefinitely postpone symptoms of a chronic malady which have previously been frequent in their occurrence. Thus in epilepsy, in the earliest stage of onset the convulsions are apt to be increased in frequency and severity but as the disease progresses they become less severe and less frequent, so that by the time the illness is well developed, the ordinary convulsions cease and remain absent for so long a time during convalescence that both the patient and his friends are cheered with the belief that his severe acute illness has been a blessing in disguise. Unfortunately, only too frequently it is but a temporary remission, produced perhaps by exhaustion of the nervous centers, and no sooner is perfect health restored, at least so far as the typhoid infection is concerned, than the epileptic paroxysms return with a vigor equal to that manifested before the acute illness. DIDÉ believes that the convulsions which occur during the early stages of the disease are the result of the toxemia. In those cases of epilepsy which seem to arise for the first time as the result of an attack of typhoid fever, he thinks that they are due to cellular changes produced in the nervous centers by the action of the poisons developed during the course of the disease. The whole subject of the relation of infectious processes to chronic maladies, particularly those of the nervous system, is of the greatest possible interest, and requires more accurate clinic and statistic study than has heretofore been accorded it.

VISIONS.

The origins of hallucinations of sight, resulting in visions, and those of hearing called voices, are very interesting studies. MORTON PRINCE of Boston, in an experimental study of visions, published in the winter number of *Brain*, has deduced some interesting points about visions. His experiments were made upon a hysteric neurasthenic, in whom he was able to establish three personalties, or three conscious states, by hypnosis. PRINCE divided the visions produced into those of conscious or unconscious visual experiences, those newly created from past experiences not visual but from some other sense experience, and those without known past experiences. The visions did not confine themselves to the one class; frequently two classes were associated at the same time. Probably, as PRINCE contends, JOAN of ARC and many other religious enthusiasts had read or heard of some particular act or scene, and then in their own way created some individual visual interpretation of it; this in turn served as a basis for the vision. All possible combinations may exist, so that it may be quite impossible to define any particular thing to which one can directly trace the vision. This fact is very suggestive in the possible explanation of many dreams, which at times seem never before to have figured in one's experience. The condition may be made to cover the hallucinations of sight and hearing of the clairvoyant and trance medium. Such studies give us many medicolegal points in the disordered consciousness of epileptics, where passing thoughts in the normal state become the criminal acts in the so-called psychic attacks. From PRINCE'S study we infer that ideas long sought for and dwelt upon may ultimately appear to the prophet or genius of arts as inspirations. Undoubtedly most people would read the experiences of their subconscious states without having the slightest inkling that it had to do with themselves, as many impressions of the different sense organs never arise into normal consciousness and are not known or remembered. This study of PRINCE'S is very instructive, and quite in accord with our present day psychologic studies on consciousness and its disorders.

ARTIFICIAL SUPPURATION IN THE TREATMENT OF PYEMIA AND OTHER ACUTE DISORDERS.

HARVEY observed that in cases of general infection the advent of local suppuration was attended with amelioration of the constitutional symptoms. FOCHIER was, in 1891, led to induce suppuration artificially under like conditions; at first using for this purpose

an acid solution of quinin sulphate, later 10 per cent. solution of silver nitrate, and finally, oil of turpentin given by injection beneath the skin. The results were entirely satisfactory. Numerous observers in different countries have employed this measure with equally satisfactory results in the treatment of such varied conditions as pyemia, septicemia, typhoid fever, erysipelas, osteomyelitis, scarlet fever, pneumonia, etc. FOCHIER originally thought that the artificially induced abscess attracted noxious matters, including bacteria, but the pus-collections were, as a rule, found to be sterile. Subsequently CHANTEMESSE attributed the favorable results to a hyperleucocytosis, but he failed to find the number of white blood-corpuscles increased. By others it has been believed that antitoxins were developed in connection with the formation of the abscess, and that to these the salutary effects were attributable. The results can not be questioned, and sufficient evidence has accumulated to justify the application of the principle in suitable cases. An illustrative case is reported by MENKO (*Berliner Klin. Woch.*, February 27). A woman, 43 years old, developed symptoms of general pyemia, including arthritis, neuritis, phlegmasia alba dolens, chills, pyrexia and delirium, following a gynecologic operation performed without sufficient antiseptic precautions. Other measures failing, the conditions growing worse, and the prognosis appearing gloomy, 30 minims of oil of turpentin were injected into the calf of the left leg. Subcutaneous injections of morphin were required to overcome the resulting pain. After three days, redness, and after three days more, fluctuation appeared at the site of injection, and puncture disclosed the presence of pus. The result was remarkable. There was at once improvement in the symptoms, with recrudescence, however, as the abscess subsided. Accordingly, a second injection—again of 30 minims of oil of turpentin,—was given beneath the insertion of the left deltoid muscle, seventeen days after the first. By the following day redness and heat were evident, together with swelling. Improvement again set in and now progressed to ultimate recovery.

Medical News.

DR. AUSTIN FLINT, New York City, the well-known authority on diseases of the brain, is reported seriously ill with pneumonia.

DR. CHARLES JEWETT of Brooklyn, N. Y., is to succeed Dr. Alexander J. C. Skene, as president of the Long Island College Hospital.

BAGDAD is said to be a mecca for physicians, since, with a population of 130,000, there are but three resident physicians with a European training.

DR. DONALD MACLEAN has resigned his commission in the medical department of the United States Army and resumed practice in Detroit, Mich.

IT IS said that Dr. Lewellys F. Barker will succeed Dr. Simon Flexner at the Johns Hopkins Medical School, Baltimore, as professor of pathology.

HOWARD UNIVERSITY, Washington, D. C., held its annual commencement exercises May 12. The graduating class from the medical department numbered nineteen.

PROF. EDWIN KLEBS, Chicago, has opened a free clinic at 398 Morgan street, for the poor who are suffering from consumption, scrofula and sundry diseases.

DR. L. C. CARR, brigade surgeon U.S.A., in command of the military hospital, Santiago, Cuba, has been in Cincinnati, his former home, for the past few days on furlough.

OUT OF seventy-eight applicants (five colored) who appeared before the Louisiana State Board of Medical Examiners on May 1 and 2, thirteen (two colored) or 16.66 per cent. were rejected.

DR. GEORGE T. VAUGHAN of the marine-hospital service, professor in Georgetown University, Washington, D. C., has been ordered to Berlin to attend the International Tuberculosis Congress.

RECENT commencements have been held at the following institutions: Medical College of Virginia, Richmond, with a class of 23; Miami Medical College, Cincinnati, 16, and St. Louis Medical College, 27.

GOVERNOR ROOSEVELT, of New York State, has signed the pure beer bill, which forbids the use of any substitute for hops or pure extract of hops in the manufacture of ale or beer. (See JOURNAL, February 18, p. 387.)

IT IS stated that William O'Donnell, Newburg, N. Y., during a severe spell of coughing, recently, expelled a tack which he had swallowed eight years previously. The tack had been in the lung, where it had become encysted.

AT THE competitive examination held at the University of Pennsylvania, Philadelphia, for five positions on the resident staff of the Mercy and Roselia hospitals of Pittsburg, eighty-five candidates presented themselves. Among the competitors were representatives from Jefferson Medical College, Philadelphia; Johns Hopkins, Baltimore; College of Physicians and Surgeons, New York City; as well as those from the University of Pennsylvania.

DR. WILLIAM OSLER will leave Baltimore for London on May 31. As Cavendish Lecturer for 1899 he will probably select cerebrospinal meningitis as his theme, dwelling particularly on the late investigations made during the present epidemic.

DR. J. J. KINYOUN, Washington, D. C., of the marine-hospital service, and professor at Georgetown University, has been relieved as director of the laboratory of hygiene, and directed to proceed at once to San Francisco and assume charge of U. S. Quarantine Station.

CEREBROSPINAL fever, which has been for some time prevalent in the vicinity of Lancaster and Manheim, Pa., has more recently invaded the neighboring district, including Ephrata. Six deaths have so far been announced, and several persons are still affected with the disease.

IN CONSEQUENCE of the notoriously dirty public hacks used at night in Washington, D. C., the chief of police has directed the officers to investigate the sanitary condition of all public vehicles, with a view of

improving the service and lessening the possibility of the spreading of disease.

THE NEW floating hospital of the St. John's Guild was launched with appropriate ceremonies in Brooklyn, May 1. It is the gift of Mrs. Augustus D. Juillard, built at a cost of $35,000, and will be used during the coming summer in addition to the old floating hospital. The set of flags for the new craft, which were presented by Ex-Mayor William L. Strong, were hoisted by a detail of sailors from the United States receiving ship, *Vermont*.

A BRIGADE hospital has been established at Iloilo, P. I. It occupies two buildings, formerly private residences, one accommodating convalescents and members of the hospital corps, the other, and larger, containing a ward of fifty beds, offices, dispensary, operating-room, store-rooms, kitchen and dining-room. A small, isolated building has been provided as a smallpox ward. The entire capacity is seventy-five beds. Major E. R. Morris, brigade-surgeon, vols., is in command of the establishment.

RELATIVE to an order concerning candidates for positions on the staff of resident physicians of the Philadelphia (Blockley) hospital (see JOURNAL, May 6, p. 1009), the mayor stated that as this institution is supported only by the taxpayers of the city, therefore only those candidates should be eligible who contribute toward its support. However, the medical colleges took an entirely different view of the matter, and their representatives waited on the mayor in order to have the order abolished, and he decided to rescind it.

DR. T. D. CROTHERS of Hartford, Conn., and Dr. C. W. Shepard of Brooklyn, N. Y., were given a public reception at the medical society rooms, London, April 13, by the English society for the study of inebriety. Dr. Norman Kerr presided, and speeches were made by Drs. Morton Smith, Haywood and others, after which a dinner was served. The National Temperance League Society also gave them a dinner while in London, on their return from the recent congress for the study of abuses of alcohol, held in Paris.

THE ANNUAL commencement exercises of the medical department of Tulane University of Louisiana were held on May 3. There were eleven graduates in pharmacy, including one woman. Of 102 applicants for graduation 85 were granted diplomas, 17 or 16.6 per cent. failing. The valedictory address, on "Prevention of Disease in Man," was delivered by Willoughby E. Kittredge, A.B. (Tulane) M.D. Prof. Edwin Anderson Alderman, D.C.L., president of the University of North Carolina, delivered the annual address, taking as his subject the industrial and social conditions of the South at the present day.

AT A meeting of the Board of Trustees of Columbia University, held May 1, it was announced that a gift of $10,000 had been received from the New York Chamber of Commerce, to be known as the Waring Municipal Fund, in memory of the distinguished sanitary engineer, George E. Waring, Jr., and a like sum from Isaac E. Dyckman, in memory of his uncles, Dr. Jacob Dyckman, a graduate of the class of 1810 and of the class of 1813 of the College of Physicians and Surgeons, and James Dyckman, of the class of 1811, for the foundation of a fellowship in biology.

EXTENSIVE improvements are being made for the enlargement of the laboratory of hygiene and bacteriology of the University of Pennsylvania. The first floor of the new wing will seat upward of 200 students, about twice the size of the present one. This floor will be utilized as a lecture-room. On the second floor will be a class-room for the study of elementary bacteriology. This room will be utilized by both dental and medical students. The laboratory was the gift of Mr. Henry C. Lea. The new wing and all the departments of the laboratory will be under the entire supervision of Dr. A. C. Abbott.

THE ANNEX to the Charity Hospital in New Orleans—the Richard Milliken Memorial Hospital for children—was dedicated on May 4. Mayor Walter S. Flower, on behalf of the donor, Mrs. Richard Milliken, formally presented the building to the board of administrators of the hospital. Addresses were made by Dr. E. S. Lewis, vice-president of the board, and by Governor Murphy J. Foster, ex-officio president. The total expenditure for the erection and furnishing of this addition was $101,000; the capacity is 160, distributed into eight wards. The annex contains, besides the wards, a surgical dressing room, electric room, plaster and orthopedic room, sterilizing room, dressing and waiting rooms, sun-room and an operating-room, with two raised galleries around it to accommodate a medical audience.

SURGEON-GENERAL STERNBERG has approved a plan for the establishment of a school at the Washington (D. C.) barracks, for the instruction of hospital-corps men in the preparation of food for the sick and wounded in the army. The work will be carried on under military regulations, with a view of organizing an efficient corps of men for the preparation of such food. The experiment is being made under the actual direction of Capt. W. F. Lippett, assistant-surgeon. Capt. W. C. Borden, surgeon in charge of the hospital of the barracks, is co-operating in the work. Authority has been given for the employment of an expert civilian cook. In case the plan proves successful, similar schools will be established at other military posts.

IN ARTIFICIALLY preparing the substance known as vanillin, by a large chewing gum establishment of Philadelphia, there occurred an explosion sufficient to wreck several buildings and fatally injure three persons. At the coroner's inquest one witness stated that a part of the process consisted in pouring into a large tank of benzol both sulphuric acid and sodium carbonate. Chemic change quickly ensues with the evolution of quite high heat, often rising to a temperature of 186 degrees. In order to keep excessively high temperature from occurring ice is used about the tank. On the morning in which the accident occurred, after the chemicals were mixed, effervescence occurred so rapidly that it boiled over, and having such a high temperature caused a terrific explosion of several hundred gallons of benzol, benzin and gasoline, stored in the building.

AN UNUSUAL HONOR TO AN AMERICAN SURGEON.—Dr. Frederic S. Dennis of this city, is the worthy recipient of the honorary degree of Fellow of the Royal College of Surgeons, England. This degree of F.R.C.S., Eng. has never been conferred before on an American, as a candidate in course must have been a member for twenty years, and only two are conferred on the members each year. There are two or three men in this country who have the degree by examina-

tion, one of whom is connected with the Johns Hopkins University in Baltimore. The many friends of Professor Dennis will join with us in our congratulations for this well-deserved distinction.—*Medical Record*, May 6.

Association News.

Section on Ophthalmology.—Contributors of papers will confer a favor by forwarding to the secretary, Dr. C. H. Williams, 15 Arlington St., Boston, Mass., as early as possible, an abstract of their contributions, so that satisfactory arrangements can be made for a discussion of the same.

For Columbus Meeting.—The committee on transportation, of the New York County Medical Association, is arranging for rates, train service, etc., for the Columbus meeting of the AMERICAN MEDICAL ASSOCIATION, June 6 9. Those intending to go and desiring to take advantage of such arrangements as can be made will kindly address, as soon as possible, Dr. Parker Syms, chairman of committee, 50 West 47th Street, New York City.

General Business Committee.—The first meeting of this committee will be held on Monday afternoon, June 6, at 5 o'clock, in the Columbia Rifles Armory, seventh floor of the Great Southern Hotel, Columbus, Ohio; subsequent meetings in the same place at 5 P.M. on each day of the meeting. It is very important that all the members of the committee should attend the meetings, in order that the business of the ASSOCIATION may be properly transacted. L. Duncan Bulkley, M.D., secretary General Business Committee.

Railroad Rates for the Columbus Meeting.—The committee on transportation of the AMERICAN MEDICAL ASSOCIATION presents the following, as the final rates agreed upon in the different territories for the Columbus meeting:

The New England Passenger Association, Trunk Lines Association, Southwestern Passenger Bureau and Southeastern Passenger Association grant a rate of one and one-third fare for the round trip on certificate plan.

The Central Passenger Association has granted a one-fare rate for the round trip. The Western Passenger Association has granted a one-fare rate plus $2 for the round trip. In the latter territory, where the rate for passage to the eastern gateway is $6 or less, the rate will be one and one-third fare for the round trip, provided that where one-third fare to Chicago is $2 or less, 50 cents addition will be added to the cost for return transfer. (See JOURNAL, May 6, p. 1012.)

Tickets will be on sale in the various railroad territories on time, in advance, sufficient for reaching Columbus, the place of meeting, by continuous uninterrupted trip. Delegates should notify ticket agents in advance, in order to secure the certificate platform.

H. L. E. JOHNSON, M.D.,
Chairman Transportation Committee.

Section on Cutaneous Medicine and Surgery.—The preliminary program of this Section comprises the following papers:

JUNE 6, 3 P. M.

1. Chairman's Address. Wm. Thos. Corlett, Cleveland, Ohio.
2. The Nature and Treatment of Cancer of the Skin. A. Ravogli, Cincinnati.
3. Alopecia. Delos L. Parker, Detroit, Mich.
4. Smallpox and Its Early Recognition. J. L. Hess, Cleveland, Ohio.
5. Notes on the Use of Hydrogen Peroxid in Dermatologic Practice. L. Duncan Bulkley, New York City.
6. Discussion. The Treatment of Lupus. (a) Lupus Vulgaris, (b) Lupus Erythematosus.

JUNE 7, 2:30 P. M.

7. Presentation of Cases. A Case for Diagnosis. B. Merrill Ricketts, Cincinnati.
8. Report of a Case of Herpes Gangrenosus in the Third Generation. A. W. Brayton, Indianapolis.
9. Notes of a Case of Pityriasis Rubra Pilaris. Joseph Zeisler, Chicago.
10. Personal Observations of Impetigo (Impetigo Bullosa) in the Fifth O. V. I. J. S. Windisch, Cleveland, Ohio.
11. Cutaneous Electrolysis. Fred J. Leviseur, New York City.
12. Practical Observations on Prurigo Hiemalis. S. S. Thorn, Toledo, Ohio.
13. Discussion. The Treatment of Eczema. (a) Constitutional, (b) Local.

JUNE 8, 2:30 P. M.

14. Clinic Presentation of Cases. Demonstration of an Eruption Produced by Small Doses of Quinin. Arthur H. Bowen, Columbus, Ohio.
15. Contagion in Leprosy as Observed in San Francisco. Douglas W. Montgomery, San Francisco.
16. Some Questions Relative to the Diagnosis of Anesthetic Leprosy. J. G. McDougal, New Lexington, Ohio.
17. Report of Pathologic Findings in the Lesions of Tertiary Syphilis. R. G. Perkins, pathologist to Lakeside Hospital, Cleveland, Ohio.
18. Chancre of the Lip in a Child Seven Months Old, Probably Acquired Through a Feeding Bottle. L. Duncan Bulkley, New York City.
19. Malignant Syphilis with Report of Cases. C. Travis Drennen, Hot Springs, Ark.
20. The Employment of Mercury in Tertiary Syphilis. A. H. Ohman-Dumesnil, St. Louis, Mo.
21. Discussion. The Management of Syphilis.

Section on Stomatology.—The complete program of this Section for the Columbus meeting of the ASSOCIATION is as follows:

1. Chairman's Address. G. V. I. Brown, Milwaukee.
2. The Human Face and Jaws as a Danger Signal of Systemic Defect or Disorder. J. G. Kiernan, Chicago.
3. Cocain and Eucain, their Relative Toxicity. A. H. Peck, Chicago.
4. Epithelial Structures in the Peridental Membrane. Frederick Noyes, Chicago.
5. Infectious Ulcerative Stomatitis. John S. Marshall, Chicago.
6. Oral Surgical Operation (with illustrations showing remarkable results). G. V. I. Brown, Milwaukee.
7. Some Points on Etiology, Pathology and Treatment of Persistent Pyorrhea Alveolaris. G. T. Carpenter, Chicago.
8. Interstitial Gingivitis (so-called Pyorrhea Alveolaris), giving the result of original work, with large microphotographic illustrations showing the progress of the disease from the beginning to the Exfoliation of the Teeth. Eugene S. Talbot, Chicago.
9. Syphilitic Infection from Dental Instruments, with Cases. W. L. Baum, Chicago.
10. Therapeutics of Inflammation. W. B. Hill, Milwaukee.
11. Professional Education and Ethics. A. E. Baldwin, Chicago.
12. Neuralgias Due to Progressive Lesions of the Periosteum. M. H. Fletcher, Cincinnati.
13. Treatment and Positive Cure of Pyorrhea Alveolaris in Connection with Restoration of Normal Articulation. W. G. A. Bonwill, Philadelphia.
14. So called Pyorrhea Alveolaris. Ephraim Cutter, New York City.

Dr. Bonwill will hold clinics independent of the meetings of the Section, to those who wish to meet him.

Public Health.

Smallpox a Predisposing Cause for Tuberculosis.—Hervieux has noted that only 3 per cent. of 360 persons who have had smallpox and been followed to date have escaped tuberculosis.—*Presse Méd.*, April 19.

Dental Care for School Children in Russia. The Russian Association for the Promotion of the Health of the People has appointed a committee, Dr. Limberg chairman, to organize a system for caring for the teeth of the children in the schools of St. Petersburg and eventually throughout the country. The

aim at present is to have a dental office for every 150 students. —*St. Petersb. Med. Woch.*, April 8.

Philadelphia Mortality Statistics.—The number of deaths occurring in this city for the week ending May 6, was 477, a decrease of 24 over that of the previous week, and an increase of 32 over the corresponding period of last year. The following were the principal causes of death: Apoplexy, 22; nephritis, 34: cancer, 12; tuberculosis, 57; heart disease, 38; appendicitis, 3; paralysis, 5; suicide, 3.

Mortality Statistics from the Philippine Islands.—Major H. W. Cardwell, chief surgeon, First Division of the army corps operating in the Philippines, has sent to the surgeon-general at Washington, D. C., a translation of a report by Sr. del Busto, president of the bureau of statistics of the "Junta de la Reforma Municipal" at Manila during Spanish rule, and director of the experimental station and chief of the school of agriculture for Manila. The report is based on the official Spanish reports and contains the best information available for the five years ending with the year 1898. It shows for each of the many provinces the population, the number of inhabitants per square kilometer, the number of deaths annually, the average number of deaths per week and the ratio of deaths to population. From it we learn that Manila has the densest population, 162 per square kilometer, but in the total number of its inhabitants, 315,571, this province is exceeded by Cebu, which is represented as having 504,706, and by Iloilo, 472,798, the latter with 225, the former with 120 per square kilometer. The percentages of mortality in these three provinces are: 2.62 in Manila, 2.44 in Iloilo and 2.24 in Cebu. The average rate of the whole of the provinces, with a population of 6,211,706, is given as 2.71. The highest rate, 5.39, is found in Cagaya, which has a population of 96,357, scattered at the rate of 6 per square kilometer. This is the only province which has a death-rate exceeding 5 per cent; and in addition to it only one province, Isabella de Luzon, has a rate in excess of 4 per cent. On the other hand, the rate in some localities is very low: 1.04 in Marianas and 1.08 in Commandancia P. M. de Burrias, both thinly peopled, the former with 9770 and the latter with only 1753; but Abra, which has a population of 49,702, has a death-rate of only 1.20. These statistics show the Philippines in a better light than they are viewed by sanitarians and by people generally in the United States.

Medical Practice in Illinois.—Under the provisions of the law now in force in this State, non-graduate applicants for a license to practice medicine and surgery are examined by the board of health, and if found qualified are granted certificates. This law will be repealed June 30, 1899, after which date each applicant must present a diploma. A final examination for non-graduates in medicine will be held at the Great Northern Hotel, Chicago, June 21-24, 1899, commencing at 9 A.M., June 21. The examination will be in the following branches: Anatomy, physiology, chemistry, materia medica, pathology and bacteriology, surgery, theory and practice of medicine, obstetrics, gynecology, hygiene and medical jurisprudence. The fee for the examination is $20, which is returned if the applicant fails. Applicants must comply with the requirements set forth in the resolution adopted Oct. 5, 1897, or must furnish evidence of having attended at least two courses of lectures in a recognized medical college. Applications should be accompanied by two letters of recommendation signed by licentiates of the board, and the fee should accompany the application. Under the provisions of the law in force, certificates are issued by the board to graduates of medical colleges in good standing, as may be determined by the board. The fee for such certificate is $5. On and after July 1, 1899, all applicants—except graduates of medical colleges in Illinois in good standing, as may be determined by the board, who *may* be granted certificates without examination—will be required to present a diploma from a legally chartered medical college in good standing, as may be determined by the board, and pass an examination. This examination will embrace those general subjects and topics, a knowledge of which is commonly and generally required of candidates for the degree of doctor of medicine by reputable medical colleges in the United States. The fee for this examination is $10 and for a certificate $5. All applications for a certificate under the present law must be in the office of the secretary of the board on June 30, 1899, accompanied by the proper fee. Applications for an examination should not be made until July 1. Applicants who desire to be registered under the present law should forward their diplomas by express, prepaid, to the secretary of the board at Springfield, for verification. Applications should be accompanied by two letters of recommendation signed by licentiates of the board. In the case of physicians residing in other States, the letters can be signed by members of the State board of health or of registration and examination, or by physicians of national prominence. While the board has not adopted any rules relative to the examination and will not do so until the regular quarterly meeting on July 11, it is probable that the subjects in which such candidates will be examined will be the following: Anatomy, physiology, chemistry, materia medica and therapeutics, pathology and bacteriology, surgery, theory and practice of medicine, obstetrics, gynecology, hygiene and medical jurisprudence; the examination to be in writing. It is probable also that the first examination will be held in Chicago, July 26, 27, 28 and 29. It is thought that *all* applicants (who must be graduates of medical colleges in good standing, as may be determined by the board) will be required to pass an examination.

Health Reports.—The following cases of smallpox, yellow fever, cholera and plague have been reported to the surgeon-general of the United States Marine-Hospital Service for the week ended May 6, 1899:

SMALLPOX—UNITED STATES.

Alabama: Mobile, April 29, 1 case.
California: Los Angeles, April 22-28, 1 case, 1 death.
District of Columbia: Washington, April 28, 1 case.
Florida: Jacksonville, April 22-30, 9 cases.
Illinois: Chicago, April 17-29, 2 cases.
Louisiana: New Orleans, April 22-29, 16 cases, 1 death: Shreveport, April 22-29, 2 cases.
Maryland: Baltimore, April 30 to May 2, 2 cases.
Massachusetts: Boston, April 17-26, 9 cases.
Michigan: April 22-29, present at two places, Benton Harbor and Kalamazoo township.
New Mexico: Las Cruces, April 27, many cases.
New York: Buffalo, April 29, 1 case.
Ohio: Cincinnati, April 21-28, 15 cases, 2 deaths.
Pennsylvania: Erie, May 2, 1 case; Pittsburg, April 22-29, 1 case.
Texas: Del Rio, April 18, 1 case; Galveston, April 15-22, 8 cases.
Virginia: Newport News, April 25 to May 1, 4 cases; Norfolk, April 25 to May 2, 4 cases, 1 death; Portsmouth, April 25 to May 2, 15 cases.
Washington: Spokane, April 22-29, 2 cases.

SMALLPOX—FOREIGN.

Brazil: Rio de Janeiro, March 11-24, 11 deaths.
China: Hongkong, March 11-25, 4 cases, 3 deaths.
Colombia: Barranquilla, April 1-8, 2 cases.
England: London, March 8-15, 3 cases.
Formosa: Tamsui, February 10 to March 10, 86 cases, 2 deaths.
Greece: Athens, April 8-15, 16 cases, 5 deaths.
India: Bombay, March 28 to April 4, 10 deaths; Calcutta, March 18-25, 6 deaths; Madras, March 11-25, 1 death.
Korea: Seoul, March 11-18, smallpox present.
Mexico: Chihuahua, April 8-22, 3 deaths; Mexico, April 16-23, 16 cases, 5 deaths.
Nicaragua: Bluefields, April 15-22, 1 case.
Russia: St. Petersburg, April 1-15, 30 cases, 8 deaths.
Turkey: Constantinople, April 10-17, 10 deaths: Smyrna, April 8-15, 1 death.

YELLOW FEVER.

Brazil: Rio de Janeiro, March 10-24, 112 cases, 88 deaths.

CHOLERA.

India: Bombay, March 28 to April 4, 3 deaths; Calcutta, March, 18-25, 17 deaths.

PLAGUE.

Formosa: Tamsui, February 10 to March 10, 201 cases, 123 deaths.

India: Madras, April 18-24, 1 death.

Book Notices.

Annual and Analytic Cyclopedia of Practical Medicine. By CHARLES E. DE M. SAJOUS, M.D., and One Hundred Associate Editors, assisted by Corresponding Editors, Collaborators and Correspondents. Illustrated with Chromo-Lithographs, Engravings and Maps. Vol. III. Philadelphia, New York and Chicago: The F. A. Davis Co. 1899.

The third volume of this practical work is fully up to the standard of the former ones. The subjects covered are from "Dislocations" to "Infantile Myxedema," many of which are elaborately gone into and in every instance are brought up to the times by liberal quotations from the latest literature. While the peculiar method of placing the quotations in narrow columns, and the monotonous way of repeating "literature of '96, '97, '98," may seem unnecessary and far-fetched, still, when one becomes used to it, this objection will vanish. The papers of most importance are "Dislocation," and "Fractures"—two papers coming in different parts of the work under their respective letters—by Lewis A. Stimson and Edward L. Keyes, Jr.; "Dysentery," by Simon Flexner; "Dysmenorrhea," by Andrew F. Currier; "Eclampsia," by Egbert H. Grandin; "Endometritis," by Henry T. Byford; "Epilepsy," by W. B. Pritchard; "Hernia," by W. B. Coley; "Hip Joint Disease," by Reginald H. Sayre; and "Hypnotism" by J. T. Eskridge. This latter is an especially well-written statement of the subject, the author taking a conservative view both as to the beneficial effects as well as to the dangers of hypnotism. Other papers could well be included in the above list, for many of them are quite elaborate descriptions, and all are well prepared, as might be expected, considering the excellent names which are signed to them. The volume is to be commended as one containing a thorough modern statement of the subjects which it contains.

Anatomy of the Central Nervous System of Man and of Vertebrates in General. By PROF. LUDWIG EDINGER, M.D., Frankfort-on-the-Main. Translated from the Fifth German Edition by WINFIELD S. HALL, Ph.D., M.D., Professor of Physiology in the Northwestern University Medical School, Chicago, assisted by PHILO LEON HOLLAND, M.D., Instructor in Clinical Neurology, and EDWARD P. CARLETON, B.S., Demonstrator of Histologic Neurology, same institution. Illustrated with 258 Engravings, 6½ by 9½ inches. Pp. xi-446. Extra cloth, $3.00. Philadelphia: The F. A. Davis Co.

This translation of the fifth edition of Edinger's well-known work will be of value to the English-speaking students and should be well received. The only changes that have been made, as the translators state, are the designation of chapters instead of "lectures," as in the original, this requiring an occasional change in diction and the omission of a few passages that were deemed non-essential. The illustrations appear to have been all retained and are well executed. The index is especially full and complete. The translation appears well done and the publishers have brought out the work in good style.

Manuale di Organoterapia, del Dott. By EMILIO REBUSCHINI. 16mo. Pp. viii-441. Milano: Ulrico Hoepli. 1899.

This little work, the latest of the voluminous Hoepli series of publications, gives a very fair summary of the facts and theories of modern organotherapy, from Brown-Sequard's first publication down to the present time. It is, as might be supposed, more a compilation than a critic review of the subject, but the views of each author and investigator are given as fully as required, and the reader can form his own judgments. The compiler's literary research appears to have been quite thorough, and to any one who reads the Italian it may prove very useful, and save extensive references to works and memoirs scattered through medical literature and often difficult of access.

Chemistry: General, Medical and Pharmaceutic, including the Chemistry of the U. S. Pharmacopeia. By JOHN ATTFIELD, F.R.S. New (16th) Edition. In one royal 12mo volume of 784 pages, with 88 illustrations. Cloth, $2.50 net. Philadelphia and New York: Lea Brothers & Co.

The progress of chemistry at the present time is such that a revision of text-books is required every few years. This is not specially true of chemistry, but of all branches of science, and especially of medical science. This sixteenth edition of Attfield's well-known manual, therefore, meets a need and, as it is especially adapted to medical students, it should meet with all the favor that did the former edition. The revision has been thorough, and yet, by the omission of superfluous material, it is not more cumbersome, while fully up-to-date. The index is especially full, occupying over sixty pages, which fact greatly enhances its value for reference.

Pathology and Treatment of Sexual Impotence. By VICTOR G. VECKI, M.D. From the author's second German edition, revised and rewritten. Philadelphia: W. B. Saunders, 1899.

In the main this is a well-written scientific work. It is only in certain details that it is open to the criticism that the author in his preface anticipates and resents. We may be a little puritanic still in this country, but this is better than the too free adoption of what we may call Continental as opposed to American and English moral standards. We need not go further on this point than to say that in one or two therapeutic recommendations, the author is certainly open to legitimate criticism. Apart from the matter mentioned above, the work can be recommended as a scholarly treatise on its subject, and it can be read with advantage by many practitioners. It is not designed for a popular work.

Clinical Lectures delivered before the students of the Imperial Moscow University. By N. A. ZACHARIN, M.D., Late Professor (emeritus) of Clinic Medicine and Director of the Therapeutic Faculty Clinic of the Imperial Moscow University; honorary member of the Imperial Academy of Science at St. Petersburg. Translated from the fifth Russian edition by ALEXANDER ROVINSKY, M.D. Boston: Damrell and Upham. 1899.

This is somewhat of a novelty to American readers, being a translation of a Russian medical work, though there is a Russian medical literature that might profit us with a larger acquaintance. Dr. Zacharin's name is known to us from his connection with the case of the late Emperor Alexander, which made it familiar to the whole civilized world. Judging from these lectures, he appears to have been a scientific physician, well up in modern ideas and undeniably an able and successful teacher. His work is well worth the attention of American physicians.

Necrology.

WILLIAM W. GODDING, M.D., the surgeon in charge of the Government Hospital for the Insane, Washington, D. C., died at that institution on the 6th instant, after an illness of but a few days. Dr. Godding served continuously as chief of the hospital for twenty-two years, was a man of great force of character and ability in his profession and at the same time a public-spirited citizen, always active in the affairs of the capital. In his particular field he did much to develop the institution which was under his care, and the splendid hospital, in its efficiency and smooth administration speaks for his ability. He

was born at Winchendon, Mass., in 1831, receiving the degree of Bachelor of Arts from Dartmouth College, in 1854, and the degree of Doctor of Medicine from Castelton College, in 1857. He engaged in general practice for two years and then became assistant physician in the New Hampshire State Asylum for the Insane, where he continued for three years, married, resigned from the hospital and re-engaged in private practice at Fitchburg, Mass. In 1863 he returned to the specialty of mental diseases, in the capacity of assistant physician in the Government Hospital for the Insane, at Washington, and after a service of seven years in that institution, was made Superintendent of the Massachusetts Hospital for the Insane, at Taunton. In 1877, on the resignation of Dr. Chas. H. Nichols, he returned to the Government Hospital for the Insane, as executive and medical head of that institution. He was for a number of years professor of mental diseases in the medical department of Columbia University.

MARCUS W. ALLISON, M.D., Hagerstown, Md., died suddenly April 28, aged 56 years. During the Civil War, he served in the Confederate Army and after the war studied medicine, receiving his degree of M.D. in 1869, after which he practiced in Terre Haute, Ind., for a year, and then located in Hagerstown.

MERRITT A. BOAS, M.D., St. Louis Mo., died as the result of an operation for peritonitis, April 28. Dr. Boas was a member of the faculty of the College of Medicine and Surgery, St. Louis, and was 46 years of age.

FRANCIS BRODSKE, M.D., Racine, Wis., died April 30, aged 38 years. He was a graduate of the Columbian University, New York, and of the Bohemian University in Prague, and a member of the Wisconsin State Pension Board.

WM. A. GORTON, M.D., Providence, R. I., superintendent of the Butler Hospital for the Insane, died in Boston, May 2. Dr. Gorton was born in 1854 and in 1876 was graduated from the medical department of the University of New York, afterward serving as resident physician of Bellevue Hospital. In 1878 he was appointed physician at the prison at Auburn, and in 1885 superintendent of the Danvers Hospital in Massachusetts, leaving that institution three years later to accept the superintendency of the Butler hospital.

J. MARION MATHES, M.D., Sullivan, Ind., died May 5, at the age of 58 years. During the Civil War he was a member of Company D, 21st Indiana Infantry, and his death is attributed to the effects of a wound received during the war.

LEON A. SCHAEFFER, M.D., Kansas City, Mo., surgeon for the Firemen's Relief Association of that city, died of pneumonia May 1. He received his degree of M.D. from the University Medical College in 1894, later doing post-graduate work in New York City. He was 57 years of age.

WILLARD PARKER BOWSER, M.D., N. Y. University Medical College, 1877, of Brooklyn, N. Y., died in that city May 4. He was a Canadian, born 49 years ago, and after being a resident in New York City for some years, returned to Canada and later practiced in London, Eng., then in Brooklyn.

WILLIAM RUSSELL, M.D., oldest graduate of Harvard, class 1826, died in Barre, Mass., May 6, aged 99 years. He never wore an overcoat and was an inveterate whist player, attributing his long life to his methodic habits.

CHARLES WEBER, M.D., Reading, Pa., died May 1. Dr. Weber was a graduate of the University of Tubingen, Germany, and came to this country fifty years ago. For a time he practiced in Philadelphia.

JOSEPH J. KIRKBRIDE, M.D., Philadelphia, eldest son of the late Dr. Thomas S. Kirkbride of the Pennsylvania Hospital for the Insane, and for twenty years connected with the outpatient department of the Pennsylvania Hospital, died recently. The Doctor was a graduate of the University of Pennsylvania.

LLEWELLIN BEAVER, M.D., Reading, Pa., a graduate of the Pennsylvania Medical College, class of 1841, died May 2, aged 84 years . . . Gaston C. Bordis, M.D., Plattenville, Assumption Parish, La., May 1, aged 52 years . . . Henry H. Fessler, M.D., Williamsport, Pa., a graduate of Jefferson Medical College, April 9, aged 64 years . . . John S. Helm, M.D., Peru, Ind., May 1, aged 73 years . . . Henry Izard, M.D., Meridian, Miss., April 28, aged 65 years . . . Jedediah H. Kingsley, M.D., Rome, N. Y., April 26, aged 77 years . . . Benjamin Munday, M.D., late of the U. S. Medical Corps, Richmond, Va., May 4 . . . John Pence, Carlinville, Ill., April 26, aged 31 years . . . George H. Williamson, Delphos, Ohio, May 1, aged 45 years.

DEATHS ABROAD.

Dr. Frederick Carl Christian Ludwig Büechner, the German "Darwin," died May 1, in Darmstadt. His "Force and Matter" was published at Frankfort in 1855, and in it the theory of the ultimate indestructibility of force and matter is broached. His other contributions in book and periodical form were extensions of the same line of thought. His "Facts and Theories of Naturalistic Life of To-day," was published as late as 1887. Prof. Büechner was born March 29, 1824, at Darmstadt, and was the second son of a distinguished physician of that town. In 1843 he went to the University of Giessen, where he first studied philosophy, but afterward, in compliance with the wish of his family, turned his attention to medicine. He took the course in this subject in the College of Medicine at Strasburg, returning to Giessen in 1848 to take his degree of doctor. He then continued his studies at the Universities of Würtzburg and Vienna. He returned to Darmstadt, and, after practicing medicine for some time there, settled at Tubingen as a private lecturer, being also appointed assistant clinic professor. He was deprived of this position, however, by the authorities, in consequence of the philosophic doctrines propounded in "Force and Matter." He thereupon returned to Darmstadt, and resumed practice as a physician.

Miscellany.

Correction.—In the address on "The Medical Profession" (see JOURNAL, May 6), read *Homeopathic News* instead of *Medical Century*, and 1872 for 1892, near the end of first column on page 981.

Journals Wanted.—Although several parties have responded to our request for back numbers to complete volumes of the JOURNAL for a State library (see JOURNAL, p. 956), we still need Vol. ii, No. 19, Vol. iii, No. 4, and we will be glad to pay 25 cents each for these copies.

Roosevelt Hospital.—This New York City institution, in its twenty-seventh annual report, calls attention to its need of boilers for heating, a disinfecting plant, a cold-storage device, and a crematory for garbage. The receipts were $170,637.13 and the expenditures $148,237.45, the balance being $22,060.32. The total number of patients was 3293; the cured were 1552 and the improved 1103.

Naphthalin Cushions for Wounds.—N. Jakowlew recommends as a dressing for wounds and ulcers a gauze bag filled with naphthalin until it makes a cushion two or three centimeters thick. Rubber or wax paper is applied over the cushion, and a starch bandage. It is not renewed until soaked through with the secretions, when the naphthalin will be nearly all evaporated. Especially beneficial in ulcus cruris.—*St. Petersburg Med. Woch.*, April 15.

Urotropin in Cystitis.—McGee reports his experience with urotropin as a vesical antiseptic in the *Bull. of Cleveland General Hospital* (Vol. i, No. 1). One great advantage is its non-toxic action in ordinary disease. As much as 30 grains may be given, and larger doses have been employed. He concludes by describing it as safe, active and efficient, with an exceptional

power in changing abnormal alkaline urine to a clear acid and aseptic condition. It appears to be an almost ideal urinary antiseptic.

Lowering Water Levels and the Public Health.—The Belgian Government has been investigating the effect on the public health of lowering the water level in rivers and canals in the course of public works. Only one of the seventeen local medical committees appointed reported an unfavorable effect, and this might have been due to another cause. The rest, while theoretically disapproving, could not actually report any increase in malarial or typhoid affections.—*Semaine Méd.*, April 26.

Infusion of Oak Bark in Night Sweats.—Dr. M. Litten calls attention (*Die Therapie der Gegenwart*, March, 1899), to the use of the infusion of oak bark in the night sweats of phthisis, leucemia, diabetes, etc. He used the infusion with success during many years of active private and clinic practice. The preparation is very simple. Take an even tablespoonful of the powdered bark and pour a cup of hot water over it. Let it stand for a quarter of an hour, then strain through cloth. When cool let the patient drink it slowly.

Hebra's Refrigeration Treatment of Lupus Erythematosus.—The inflamed surfaces are treated with a refrigerating mixture of equal parts of absolute alcohol, sulphuric ether and spiritus menthæ pip., applied on cotton, frequently renewed without compression or friction. The success has been so striking in the six cases in which it has been tried (one dating from twenty-five years, no relapses in any case during the nine months), that he calls attention to the method without waiting for further confirmation.—*Vienna Med. Woch.*, 1899, 1.

Revulsion in Tuberculosis.—The last number of the *Archives Cliniques de Bordeaux*, which has suspended publication, is devoted to a study of the influence on the kidneys of the application of cantharidized blisters to the thorax; urine was normal. No inconveniences were observed in any case, and Professor Arnozan agrees with Grancher that small blisters applied repeatedly are one of the best means of arresting the progress of chronic pulmonary tuberculosis, although if the urine proves abnormal on preliminary examination, some other revulsive than cantharides should be employed.

Physiologic Colored Rings Observed Around Flames.—L. Demicheri calls attention to certain colored rings observed around a small bright flame suddenly lighted in a dark room. The colors are reversed from the order noted in Newton's refraction rings, as the red is outermost, with yellow, green, and sometimes a violet ring toward the center. He considers them a phenomenon due to diffraction. They also occur with the crystalline lens taken from lambs, cows and fishes, and are easily studied with an electric light painted black except for a small circle.—*Anales de Oftalmologia*, April.

Dionin in Phthisis.—Dionin is a combination of hydrochloric acid and ethylether morphin, and is represented by the formula $C_{17}H_{19}NO_3\,HCl+H_2O$. Dr. Schröder reports (*Die Therapie de Gegenwart*, March, 1899) a series of twelve cases of pulmonary tuberculosis in the second and third stages, treated symptomatically, mainly for cough, with dionin. The hacking cough was mitigated in all cases and entirely disappeared in some; sleep was longer, more restful and refreshing. Dr. Schröder considers dionin superior to codein and morphin as far as cough is concerned, but not as an analgesic.

Pathology of Various Human Races.—Thirty years of experience in the Dutch East Indies have convinced van der Burg that there are no diseases peculiar to certain races, but that it is merely a question of hygiene and environment. He tabulates in the *Weekb. v. h. Nederlandsch Tydschrift*, No. 11, the results of comparative observation of natives and Europeans in various affections, and demonstrates that the race is no protection. He notes the fact that advanced stages of tuberculosis in Europeans are accelerated and rapidly terminate in that climate, but that the incipient stages or the phthisic diathesis may never develop further.

Laparotomy for Tubercular Peritonitis.—In the *Bull. of Cleveland General Hospital* (Vol. i, No. 1), Crile reports seven personal observations of laparotomy for tubercular peritonitis and a number of others communicated to him by different physicians. He also goes over the history of the subject quite extensively and discusses the theories of the effectiveness of this measure. He believes that this surgical treatment of tubercular peritonitis now rests on a solid foundation, more than 80 per cent. of recoveries having been reported. When no contrary indications to operation exist, every case of tubercular peritonitis ought to be operated on as soon as fully diagnosed.

Gunshot Wounds of Abdomen.—Stepp reports a case of gunshot wound with intestinal perforation (*Bull. of Cleveland General Hospital*, Vol. i, No. 1), operated on twelve and one-half hours after the injury. The small intestines were found wounded in four different places with long ragged wounds. About eight inches of the intestines were examined at a time, no more being exposed to the atmosphere at once. The contents of the intestines were stripped away from the opening, clamps applied on either side, the edges trimmed and uninterrupted coaptation suture of No. 1 catgut applied, and over these the ordinary interrupted Lembert suture of the same material. The patient made a good recovery. He closes his paper with a reproduction of Vulliett's conclusions from an analysis of 355 cases.

Consumption of Quinin in the U. S.—The official figures of the treasury bureau of statistics show that there were imported last year into the United States 1,539,056,750 grains of quinin. As there were practically no exports of the article, this means something like twenty grains for every man, woman and child in the country. In 1897 the average import price in the United States was a trifle more than 16 cents an ounce. The statement comes from Washington, also, that during the past year, or thereabouts, more than 125,000,000 grains of quinin have been consumed by American soldiers suffering from various types of southern fevers. In some instances men who were in the hospitals in Cuba and Porto Rico were dosed regularly with 300 grains a week. Hardly an individual, it is said, failed to take the drug during some period of his service, either as a curative or preventive. Furthermore, the claim has gained credence that Americans consume one-third of the quinin of the world.

Final Fate of That Artificial Cornea.—The rock-crystal cornea inserted and held in place with hooks in an eye blind from leucoma, the other from lime (see JOURNAL, xxxi, p. 1001), remained in place eight months with eminently satisfactory results, the subject able to see persons and objects and do light work. At the end of this time the prothesis pulled out as the face was being wiped with a towel, probably a hook caught on the upper lid. There was no trace of membrane nor exudation on the crystal or metal when seen. The eye was redder; several large conjunctival vessels were noted on the spot where the prothesis had been. The leucoma at that point was much more transparent, and it had grown thinner and flatter all over. Tension diminished. There was vision, movements of hands near by and good projection of light. If the hooks had been bent at right-angles they might not have pulled out so soon, but it was only a question of time, as the leucoma had ceased to afford a support for the hooks. A lighter prothesis might have remained longer in place.—Th. v. Schroeder: *St. Petersburg Med. Woch.*, April 1.

Pennsylvania Hospital Report.—The 148th annual report of the contributors of this institution shows that the past year has been one of great activity and advancement of this hospital in part due to the large number of soldiers treated (360). The

number of new cases who received treatment in the out-patient department was 14,241, and 52,412 visits were made. During the year 16,691 patients were admitted to the receiving ward, of whom 3664 were transferred to the wards of the hospital. The hospital ambulances were in service 1496 times and the police patrols made 1306 trips. The entire cost in maintaining the Pine Street department was $113,640.78. Expenditure for the insane department in West Philadelphia was $210,878, of which $66,770 went toward defraying the support of free patients, and those who were able to pay only part of the cost. During the year the Ayer Clinical Laboratory has been erected, and a complete electric-light system has been established in connection with the hospital. Receipts from contributions and legacies were $735,000, and expenditures $324,000. A portrait in oil of Dr. Jacob M. DaCosta, who has been on the staff of the hospital for thirty-four years, has been presented by his son, Charles Z. DaCosta.

Not a "Legal Practitioner."—The supreme court of Ohio holds, in the case of State, on the relation of one Eberts, against the Ohio State Medical Board, that one who entered on the practice of medicine after the taking effect of the act of May 5, 1868, "to protect the citizens of Ohio from empiricism," etc., without graduation from a school of medicine or procuring a certificate of qualification from some State or county medical society, and had not practiced continuously for ten years before the passage of the act of May 2, 1885, is not a "legal practitioner," within the meaning of section 4403c of the act of Feb. 27, 1896, "to regulate the practice of medicine."

Liable for Improper Treatment.—The true relation between the company and its employes, as it understands it, the court of civil appeals of Texas says, in the case of the Texas & Pacific Coal Company vs. Connaughton, was this: In consideration of a reduction of the wages of all the men employed, and the profit to be made by the company, it bound itself to furnish medical treatment to such of them as should get hurt or become sick while working for the company. It should, therefore, the court holds, bear the loss of improper treatment, since the law implies in such cases an undertaking to give proper treatment. The question of whether due care had been used by the company in the selection of the physician, the court considers eliminated from the case by reason of these facts.

Control of the Army Hospital Corps.—Up to the present time the administration of the hospital corps of the army has been held in the surgeon-general's office and the war department, but, presumably on account of the difficulty of managing affairs in distant commands, an order from the war department, May 2, 1899, charges the officers commanding the division of Cuba, the department of Porto Rico, the department of the Pacific and the troops in Hawaii, with the full control of the transfer from the line, enlistment, re-enlistment and discharge of members of the hospital corps of their commands, and with the detail of acting hospital stewards, provided that the allowance of acting hospital stewards and privates of the hospital corps, as fixed for each of these commands, be not exceeded except by special authority; and provided, also, that privates shall, whenever practicable, be required to pass a satisfactory examination under regulations prescribed by the respective chief surgeons of the commands above specified, before they are detailed as acting hospital stewards. Hospital stewards, however, are appointed as provided by existing regulations, after examination under direction of the surgeon-general.

Anastomosis or Fistula Gastrocolica.—The abnormal communication between the stomach and colon transv., that occurs occasionally in cases of ulcus or carcinoma of the stomach from a perforation into the intestine, which has become attached to the organ by adherences, has only been diagnosed seven times intra vitam, although forty odd cases are on record. None of the cases was cured by an operation. Unruh is therefore pleased to report two cases in which the fistula was correctly diagnosed and one cured by surgical intervention. The colon formed a V, with the point adhering to the posterior wall of the stomach in the lesser curvature, the distal portion of the intestine collapsed. The adhering point and perforation were not disturbed, but the intestine was cut each side of the perforation and a few inches below, leaving a small V still adherent. The ends of the four stumps were closed with rows of stitches, and an anastomosis made between the distal and proximal portions of the colon, several inches below the sewed-up ends. Fecal vomiting without the symptoms of complete intestinal occlusion, and the evacuation of undigested food per anum are reliable symptoms. The introduction of air or a colored fluid into the rectum is a means of differentiating the trouble. One of the subjects complained of pressure when a rectal injection was made. Unruh recommends abstention in case of carcinoma, but advocates intervention when the fistula is caused by an ulcer or tuberculous lesion.—*Deutsche Med. Woch.*, April 29.

"No Funds" No Defense.—Mr. Justice Hirschberg holds, speaking for a special term of the supreme court of New York, in the case of Kent vs. the Village of North Tarrytown, that, if it is incumbent on the municipal authorities to raise money to defray expenses incurred by the board of health, although no provision exists in the village charter for that purpose, it can hardly be contended that want of funds is a sufficient answer in an action for services lawfully performed under employment by the board in the direct discharge of its official duties, and expressly adopted and ratified by the municipality. The restrictions of the charter as to expenditures for general purposes do not, and, from the peculiar and uncertain nature of the requirements of the case, can not, apply to expenditures in the prosecution of the work of the health department. The municipality is subject to the statutory liability, and while there may be no funds, because there has been a failure to levy and collect the necessary amount, or to appropriate a sum to meet the liability, such action is not a condition precedent to a right of recovery.

Discontinuance of the Military Hospital at Greenville, S. C.—The division hospital at Greenville, S. C., established Nov. 10, 1898, was discontinued April 27, 1899. The surgeon-in-charge was Major John L. Phillips, brigade surgeon, volunteers. The sick cared for in this hospital were members of the 203d N. Y., 4th N. J. and 2d West Va., constituting the 1st Brigade, and the 5th Mass., 4th Mo. and 201st N. Y., constituting the 2d Brigade of the 2d Division, 2d Army Corps. It consisted of a central administration building, four wards of forty beds each and a dining-room and mess kitchen. During its occupancy, 726 cases were treated, among which were 101 venereal, 97 mumps, 96 acute bronchitis, 89 croupous pneumonia (both lungs invaded in 19 cases) 70 influenza, 67 measles, 25 typhoid fever, 5 scarlet fever and 2 diphtheria. All cases of contagious diseases were isolated and treated in tents. Measles and mumps came almost exclusively from the West Virginia regiment, which command, recruited in the mountains of the State, furnished as many cases of venereal disease as all the other regiments combined. The cases of typhoid fever were contracted before coming South. No case of the disease was admitted after the middle of December, and the last cases admitted, three within a few days of each other, were from the last regiment to leave Camp Meade, Pa., about November 18. Twenty-five deaths occurred at the hospital, 23 soldiers and 2 civilian teamsters. The causes of death were croupous pneumonia 16, and 1 each from typhoid fever, acute ascending myelitis, acute endocarditis, acute fibrinous pericarditis, epithelioma of bladder, cardiac dilatation with anasarca, acute nephritis, injury from crushing by machinery, and empyema after surgical oper-

ation. One half of a ward, twenty beds, was equipped for surgical cases and proved ample for their accommodation. Most of these cases came from the venereal ward. Resection of rib was done in three cases of empyema. Of fractures there were 16 cases, and of gunshot wounds 9; with two exceptions these wounds were the result of carelessness in handling firearms. Medical supplies were abundant and of good quality. The cost of each patient per day was about 45 cents. Major Phillips closes his report by congratulating himself that no complaint against the hospital or its management was at any time submitted.

Can Assume Treatment Was Proper.—In an action brought to recover damages for injuries received from an electric wire, the court of errors and appeals of New Jersey holds that there was no error in a charge that, if the plaintiff had employed a responsible and reputable physician, he (the plaintiff) had a right to assume that the treatment was proper, and could not be kept out of damages because with a better physician he might have had better results. If he used reasonable care to select a reputable doctor, the court insists, appealed case of New York and New Jersey Telephone Company vs. Bennett, it was enough.

"Prescription" Defined.—Upon a trial of an indictment for the statutory offense of unlawfully commencing the practice of medicine without first filing a State license, the supreme court of New Jersey holds that, a witness having testified to a relevant conversation with the defendant, in the course of which the defendant gave to him a bottle, and a card upon which was written "a copy of the contents of the bottle," these exhibits were properly admitted without proof that the contents of the bottle was a medicine. The objection to the introduction of the card because the witness was permitted to characterize the writing on the card as a "prescription," upon the ground that it was a conclusion of the witness, the court does not consider rested upon a very substantial foundation, under the circumstances. It says that it was not the act of the defendant that was thus characterized, but a bit of writing then in court. In this context, the court continues, case of Mayer vs. State, the word "prescription" has long since passed from its general and etymologic meaning to a concrete and substantive use—not even participial—standing not for the act, but for the thing, to-wit, a written medical recipe. But even in its participial sense, this witness, who was a medical practitioner, the court adds, would have been permitted to employ it.

Causes of Azoospermia.—From examination of the generative organs, at a thousand necropsies, with special study of the 125 cases in which azoospermia was noted, chronic alcoholism was responsible for a large proportion and venereal affections for a third. We note the following points: In 22 cases the sterility was due to epididymitis, and the testes were normal in most of these; in 12 to bilateral interstitial orchitis. Even in cases in which two-thirds of the testicular had been substituted by fibrous tissue, spermatozoids were still noted in the excretory passages. The cases of certain syphilis presented bilateral lesions of the testes with few exceptions. Simmonds calls attention to the frequency of stricture of the vas deferens (23 cases, complete sterility in 10), of stenosis of the tubules in the epididymis, and to the ectasia of the spermatic ducts which they entail, peripheral from the constricted spot, which fill up with a milky fluid. Even the slightest pathologic modification of the excreting passages is enough to obliterate the passage and permanently injure the testes, although it is astonishing how long spermatogenesis persists under these conditions. The only possible explanation is reabsorption of the secretion in the testes. The cases were rare in which the sperm production was definitely abolished and the testes atrophied. Resection of the vas does not induce atrophy of the testis unless other formations are resected with it—confirmed by experimentation. Only six out of the large number with genital tuberculosis were sterile. Six out of 15 cases of callous degeneration of the vesicle were accompanied by a sterilizing lesion of the testis. In 8 cases of incomplete descensus no spermatozoids were found in the corresponding vesicle and the testis was microscopically degenerated. Hydrocele, varicocele and spermatocele do not cause azoospermia, but it was noted on the side affected, in six cases of inguinal hernia, although the opposite side was normal. We can accept fifteen to sixteen years as the limit of puberty. The functioning capacity of the testes has no age limit. The spermatozoids may retain their vitality in the vesicles for a long time. In the case of a man of 73, whose testes had been removed fourteen days previously, the vesicles were crowded with motile spermatozoids.—*Deutsche Arch. f. Klin. Med.*, Vol. lxi.

Discontinuance of the Military Hospital at Anniston, Ala.—The 2d Division of the 4th Army Corps was encamped during the past winter at Camp Shipp, Anniston, Ala. The regiments comprising it were the 2d U. S., 2d Ark., 3d Ala., 3d Tenn., 4th Wis., and 4th Ky. The hospital, when established in October, 1898, was a tent hospital, but wooden buildings, having a capacity of 250 beds, were soon constructed. The surface drainage was excellent. Water was supplied from the city waterworks. Pit closets were used. These were eight feet deep and disinfected by quicklime. All wastes were collected in covered barrels and hauled away daily. The hospital proper consisted of a hall 200 feet long, with a solarium at the end opposite to the main entrance. Connected to the hall by small corridors were four wards at equal intervals on each side. These were 60 feet long, 24 feet wide and 10 feet to the eaves, with ventilation by the ridge. They were heated by two large stoves for each ward and were quite comfortable in the coldest weather. There was one building for a property-room and one for a bath-room. One ward was fitted up for surgical cases. There was also a separate building, with a capacity of fifty beds, for typhoid fever cases, and two small isolated wards for cases of measles and mumps. A small room was built for disinfection by formaldehyde. There was a general mess-hall for the members of the hospital corps and convalescent patients, with a special-diet kitchen, quarters, offices and storehouses. The staff and employes consisted of a commanding officer, an executive officer, four acting assistant-surgeons, a quartermaster, who was a line officer from one of the regiments, a hospital steward, 10 acting stewards, 150 privates of the hospital corps and 23 female contract nurses. The detachment of the hospital corps was organized into a company, which facilitated matters very much in the way of discipline. The guard was furnished from one of the regiments, the hospital having its own guard-house. A trained cook was in charge of the special-diet kitchen. The average daily cost per patient was about 28 cents. The cases treated were mostly of a serious character, as trivial cases were retained for treatment in the regimental hospitals. They numbered 1009, of which 33 ended fatally. There were 93 cases of typhoid fever, with 14 deaths; 40 of pneumonia, with 10 deaths; 13 of cerebrospinal meningitis, with 7 deaths; 2 of endocarditis and 2 of appendicitis, with 1 death from each of these diseases. Among the non-fatal diseases there were 178 cases of measles, 83 of mumps, 146 of remittent fever, 69 of intermittent fever, 61 of venereal diseases, 45 of rheumatism, and 34 each of bronchitis and influenza. Thirty severe typhoid fever cases were received from the hospital of the 3rd Corps, and as the slighter cases of this disease were retained to convalescence in their own corps the rate of fatality of the 93 typhoid fever cases above mentioned is made to appear higher than it really was. The death-rate of the typhoid fever cases admitted directly from the regiments was only 9 per cent.; that of cerebrospinal meningitis was 53 per cent. The officer in command of this hospital was Lieut. Marshall M. Cloud, asst.-surgeon U. S. A.

The Public Service.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, to and including May 4, 1899:

William B. Banister, captain and asst.-surgeon U. S. A., now acting as chief surgeon 2d army corps at Augusta, Ga., is relieved from his station, Fort Keogh, Mont.

James L. Bevans, acting asst.-surgeon from St. Louis, Mo., to San Francisco, Cal., for duty in the Dept. of California.

Wilson T. Davidson, acting asst.-surgeon, from Brackett, Texas, to Havana, Cuba, for assignment in the Div. of Cuba.

J. Ryan Deveraux, acting asst.-surgeon, from Washington, D. C., to Governor's Island, N. Y., for duty in the Dept. of the East.

Charles L. Furbush, acting asst.-surgeon, from the hospital ship "Missouri" to Havana, Cuba, for duty in the Div. of Cuba.

Robert W. Guiler, acting asst.-surgeon, from Camp Mackenzie, Augusta, Ga., to Havana, Cuba, for assignment in the Division.

Verron J. Hooper, acting asst.-surgeon, will report for duty to the commanding officer U. S. transport "Sedgwick" now at Savannah, Ga.

John P. Kelly, acting asst.-surgeon, from Warrington, Fla., to Havana, Cuba, for duty in the Division.

James M. Kennedy, captain and asst.-surgeon, U. S. A. from mustering out duty at Augusta, Ga., to San Francisco, Cal., to accompany the 4th U. S. Cav. to Manila, P. I.

John R. McDill, major and brigade surgeon vols., honorable discharge from volunteer service to take effect June 30, 1899.

William O. Owen, major and surgeon vols. (captain and asst.-surgeon U. S. A.), honorable discharge from volunteer service, to take effect June 30, 1899; to proceed from San Francisco, Cal., to St. Louis, Mo., as attending surgeon and examiner of recruits at that place.

Josiah W. Richards, acting asst.-surgeon, from duty on the transport "Conrad" to report to the superintendent army medical transport service at New York City.

Robert C. Rind, acting asst.-surgeon, from the general hospital Fort McPherson, Ga., to Governor's Island, N. Y., for duty in the Dept. of the East.

D. M. Roberts, acting asst.-surgeon, from Fort Thomas, Ky., to Governor's Island, N. Y., for duty in the Dept. of the East.

Henry A. Shaw, captain and asst.-surgeon, on sick leave at Worcester, Mass.; relieved from duty at Savannah, Ga., to report at San Francisco, Cal., for service at the general hospital at that place.

Victor E. Watkins, acting asst.-surgeon, from the general hospital Fort McPherson, Ga., to Governor's Island, N. Y., for duty in the Dept. of the East.

Timothy E. Wilcox, lieut.-col., chief surgeon vols., leave of absence extended to July 31, 1899.

By orders from the commanding general, Department of Porto Rico, April 21, 1899, certain acting asst.-surgeons have been assigned to accompany troops to the United States: Joseph G. Wilson will accompany Light Battery C, 7th U. S. Art., and J. A. Escobar, Light Battery U. of the same regiment. Six medical officers are directed to report at Ponce to the commanding officer 19th U. S. Inf. to accompany that regiment. On arrival in the United States they will report by letter to the surgeon-general at Washington, D. C.: H. E. Sears, now at the Hospital San Juan; John E. Morris, with Troop I, 5th U. S. Cav. at Ponce; H. C. Cline at Adjuntas; Frank J. O'Hare at the general hospital, Ponce; Henry C. Mure at the vaccine station, Coamo; John J. Gilhuley at El Morro, San Juan.

Movements of Navy Medical Officers.—Changes in the medical corps of the U.S. Navy for the week ending May 6, 1899.

Medical Inspector M. C. Drennan, ordered to additional duty at the marine recruiting rendezvous, Philadelphia, Pa.

P. A. Surgeon W. C. Braisted, detached from the naval hospital, Newport, R. I., and ordered home to be ready for orders for sea duty.

Asst.-Surgeon J. J. Snyder, detached from the "Wabash" and ordered to the naval hospital, Newport, R. I.

Medical Director A. L. Gihon, retired, granted leave for one year, with permission to leave the United States.

Surgeon J. H. Steele, ordered to temporary duty at the recruiting rendezvous, Baltimore, Md.

Asst.-Surgeon S. B. Palmer, detached from the "Annapolis" and ordered home.

Asst.-Surgeon W. M. Garton, detached from the naval hospital, New York City, and ordered to the "Annapolis."

Surgeon J. D. Gatewood, ordered to the bureau of medicine and surgery for temporary duty.

Medical Inspector C. H. Gravatt, detached from the "New York" and from duty as fleet surgeon of the north Atlantic squadron, and ordered home to wait orders.

Medical Inspector P. Fitzsimons, detached from the "Brooklyn" and ordered to the "New York" as fleet surgeon of the north Atlantic squadron.

Surgeon G. E. H. Harmon, detached from the "Amphitrite" and ordered to the "Brooklyn."

Surgeon J. M. Edgar, detached from the "Richmond" and ordered to the "Amphitrite."

Surgeon G. P. Lumsden, detached from the "Franklin" and ordered to the "Richmond."

Surgeon S. H. Dickson, detached from the "Massachusetts" and ordered home to wait orders.

Surgeon J. G. Byrnes, detached from the Norfolk navy yard and ordered to the "Massachusetts."

P. A. Surgeon F. W. Olcott, ordered to the "Texas."

Asst.-Surgeon G. D. Costigan, detached from the "Indiana" and ordered to the naval hospital, Chelsea, Mass.

Asst.-Surgeon M. S. Elliott, detached from the "Texas" and ordered home to wait orders.

Asst.-Surgeon J. H. Payne, detached from the naval hospital, Chelsea, Mass., and ordered to the "Indiana."

Marine-Hospital Changes.—Official List of Changes of Stations and Duties of Commissioned and Non-Commissioned Officers of the U.S. Marine-Hospital Service, for the seven days ended May 4, 1899.

Surgeon W. A. Wheeler, department letter of April 2, 1899, granting him twenty-seven days' leave of absence, amended so that the said leave shall take effect from May 5, 1899.

Surgeon W. A. Wheeler, department letter of April 20, 1899, accepting his resignation to take effect from June 30, 1899, amended so that said resignation shall take effect May 31, 1899.

Surgeon S. D. Brooks, relieved from duty as member of board convened to meet at San Francisco, Cal., May 2, 1899, for the examination of candidates for appointment as asst.-surgeon in the service.

P. A. Surgeon G. M. Magruder, granted leave of absence for fourteen days.

P. A. Surgeon T. B. Perry, detailed as member of board convened to meet at San Francisco, Cal., May 2, 1899, for the examination of candidates for appointment as asst.-surgeon in the service.

P. A. Surgeon C. P. Wertenbaker, to rejoin station at Wilmington, N. C.

Asst.-Surgeon Hill Hastings, relieved from duty at Seattle, Wash., and directed to proceed to Astoria, Ore., for the purpose of establishing a U.S. quarantine station at or near that point.

Asst.-Surgeon H. C. Russell, relieved from duty at Louisville, Ky., and directed to proceed to Cairo, Ill., and assume temporary command of service.

Asst.-Surgeon H. B. Parker, detailed as quarantine officer of the port of Santiago, Cuba.

Asst.-Surgeon L. L. Lumsden, to proceed to Seattle, Wash., and assume command of service.

Asst.-Surgeon J. F. Anderson, granted thirty days' extension of sick leave from May 1, 1899.

Asst.-Surgeon L. D. Fricks, relieved from duty on U.S. transport "Sedgewick," and directed to assume temporary command of service at Savannah, Ga.

Asst.-Surgeon J. W. Kerr, to proceed to the San Francisco quarantine station and report to the commanding officer for temporary duty.

Hospital Steward E. B. Scott, to report to acting asst.-surgeon in charge, Savannah quarantine, for duty and assignment to quarters.

Hospital Steward N. C. Comfort, relieved from duty at Cincinnati, Ohio, and directed to proceed to Louisville, Ky., and report to commanding officer for duty and assignment to quarters.

CHANGE OF ADDRESS.

Adams, J. S., from 1205 Spruce to 319 S. 18th, Philadelphia, Pa.
Burns, E. W., from Honesdale, Pa., to Board of Trade Bldg., Scranton, Pa.
Butterfield, F. A., from 167 Dearborn St. to 126 State, Chicago.
Brown, S. F., from Calif. Bldg. to 1646 Court Pl., Denver, Colo.
Brewster, B. H., from Petrolia to Foxburg, Pa.
Bradley, C. D., from 131 Dearborn Ave. to 230 Hampton Ct., Chicago.
Bartholomew, J. N., from 51 Lincoln to 421 Center St., Chicago.
Beck, C., from 174 Eugenie St. to 522 Dearborn Ave., Chicago.
Brown, H. D., from Detroit to Stockbridge, Mich.
Barrett, E. J., from Honolulu, Hawaii, to Palmer House, Chicago.
Crews, G. B., from 2934 Gallup to 2417 W. 32d Ave., Denver, Colo.
Corwin, G. P., from Wasioja, Minn., to Santa Monica, Cal.
Collie, J. A., from Chicago to Williams Bay, Wis.
Coles, V. H., from 1813 West End Ave. to 1722 Cedar St., Nashville, Tenn.
Colburn, J. R., from 119½ S. Spring to Wilcox Blk., Log Angeles, Cal.
Clayton, C. F., from 600 W. 59th to 4145 Central St., Chicago.
Couch, E. E., from Milwaukee to Port Washington, Wis.
Cochran, C. C., from Curran to Hamilton, Ill.
Drayton, H. S., from 12 E. 17th St. to 70 5th Ave., New York City.
Durkee, A. C., from Chicago to Joliet, Ill.
Davis, E. A., from Richmond to Hicks Ford, Va.
Fanner, J. C., from 1315 Clinton to 502 Masonic Temple, Minneapolis, Minn.
Field, G. A., from Moorland to Callender, Iowa.
Faris, J. W., from St. Louis to Caruthersville, Mo.
Greenly, T. W., from Lake Placid to Loon Lake, N. Y.
Goggins, R. J., from Chilton, Wis., to Hobart, Ind.
Green, R. E., from Chicago to Ft. Madison, Iowa.
Gale, J. A., from 3815 Gilpin St. to 1670 Broadway, Denver, Colo.
Hill, F. E., 1702 W. Jackson St. to Johnson Bldg., Muncie, Ind.
Hendrick, F. A., from 1111 Lorain to 2508 Superior St., Cleveland, Ohio.
Henderson, R. K., from Louisville, Ky., to Fleetwood, I. T.
Hoffman, Adolph, from 6041 Vernon Ave. to 489 62d St., Chicago.
Johnson, F. W., from 626 John to 517 Central Ave., Cincinnati, Ohio.
Klebs, Dr., from 4419 Indiana Ave. to 69 22d St., Chicago.
Kyes, E. S., from New Orleans to Mandaville, La.
Lefschitz, A. H., from St. Louis, Mo., to 478 S. Morgan, Chicago.
Lundgren, C. E., from 571 Leonard to 476½ State St., Brooklyn, N. Y.
Lydston, from 1095 N. Clark St. to Hotel Luzerne, Chicago.
Marsh, W. C., from Quincy to Albion, Mich.
McCormick, C. A., from 1537 Harvard to 2146 Wilcox, Chicago.
Newman, R., from 64 W. 36th to 148 W. 73d, New York City.
Nichols, C. L., from Chicago to Karbach Blk., Omaha, Neb.
Pickett, W. H., from Chicago to 6th and M Sts., Louisville, Ky.
Parker, C. H., from 4704 St. Lawrence to 4102 Lake Ave., Chicago.
Palmer, T. D., from Denver to Canon City, Colo.
Porterfield, E., from 405 Ogden Ave. to 529 Van Buren St., Chicago.
Pirosh, B., from 43 McAlester Pl. to 348 S. Hermitage Ave., Chicago.
Piper, E. D., from Austin to 982 W. Congress St., Chicago.
Pickels, W. H., from Chicago to 212 Ridgewood Ave., Joliet, Ill.
Prentice, G. L., from Chicago to Pleasantville, Iowa.
Rutherford, J. F., from Hotel Highland to 210 S. Broadway Albuquerque, N. M.
Riche, H. G. from New Orleans to Marksville, La.
Rich, R. G., from Chicago to Fayette, Iowa.
Richards, C. H., from Chicago to Prittwood, Ill.
Reynolds, H. R., from 350 Ashland Boul. to 661 Congress St., Chicago.
Stogal J. B., from St. Louis, Mo., to 478 S Morgan, Chicago.
Senn, E. J., from 447 E. North Ave. to 25 Astor St., Chicago.
Spencer, N. W., from Omaha, Neb., to Walnut, Iowa.
Schmidt, O., from Chicago to Campbellport, Wis.
Schrender, L. S., from Shelly, Minn., to Grafton, N. D.
Stevens, F. W., from Bloomington to 780 Sawyer Ave., Chicago.
Sholars, L. A. from New Orleans to Rosepiue, La.
Turner, D. A., from Chicago to De Lamar, Neb.
Tufts, F. S., from 6016 Princeton to 7606 Butler St., Chicago.
Taylor, P. K., from New York City to Kingston, R. I.
Tenney, L. P., from Galveston to Crockett, Texas.
Van Hood, E., from New York City to Ocala, Fla.
Wing, D. E., from 4740 Madison to 4822 Lake Ave., Chicago.
Westerchulte, F. H., from 684 W. North Ave. to 27 Humboldt Boul., Chicago.
Wheaton, C. L., from 426 Lincoln to 95 Evanston Ave., Chicago.
Williams, C. B., from Galveston to Mineral Wells, Texas.
Wagner, T. H., from Silver Cross Hosp. to 315 Jefferson St., Joliet, Ill.
Wilson, E. R., from Charleston to Cades, S. C.